California GARDEN

1971
JANUARY-FEBRUARY
50 cents



to enjoy

Floral Association General Meetings on third Tuesdays.

February 19, 1971 (10-2:30) "Fun with Flowers" Floral Association annual Symposium. Mrs. W. F. Hirsch and Mrs. A. J. Antosick, demonstrators. Open to the public. Luncheon included in price. $5.50. San Diego Yacht Club.

to go

February 28, 1971 (11-4) Flower Arrangers Guild Open House. Floral Building, Balboa Park. Open to the public. Free.

March 7, 1971 (1-5) Ikenobo Ikebana Society "Ikenobo Flower Arrangement Show". Floral Building, Balboa Park. Open to the public. Admission charged.

March 12, 13, 14 San Diego County Orchid Society "Opus 25" Orchid Show. Open to the public. Admission $1.00.

to tour

February 13, 1971 INDIO DATE FESTIVAL

February 27, 1971 PORT OF CALL. Buses leave Balboa Park at 8:30, La Jolla at 9:00. $6.00.

March 20, 1971 BUSCH GARDENS. $6.00.

April 1, 1971 RANCHO SANTA ANA

For reservations and information call Floral Office (232-5762)

to learn

Flower arrangement classes every Monday morning 10-12.

First Three Mondays: Sumiko Lahey, Teacher Sogetsu School of Japanese Flower Arrangement. Ikebana. Certificates awarded.

Fourth Mondays: Mrs. Kirkpatrick. Traditional and Modern Arrangements.



Guess I'd better read California Garden!

CALIFORNIA GARDEN

VOL. 62 JANUARY-FEBRUARY 1971 NO. 1

THE COVER

Our cover was painted in India ink by Beverly Kulot. She did the painting for an article on drying flowers, but we liked it so much we asked to use it for this month's cover. The subject is a dried mass arrangement which she created. It is now in the old lighthouse at Cabrillo National Monument.

CONTENTS

Gladiolus by Ralph E. Kircher..... 5
Fire Retardant Planting by George James..... 7
Planting Potted Poinsettias..... 8
Now is the Time by Nibby Klinefelter..... 9
Trim and Prune by Jim Stalsonburg..... 10
Corkscrew Willow by Virginia M. Innis..... 11
Bare Root - Schmare Root by George Bremner.... 12
Winter Iris by Thelma Carrington..... 14
Creative Flower Arranging by Adrienne Green.....16
The Book Shelf by Doris Blick.....19
My Seaweed Garden by John E. Miller.....20
Big, Small and Rare by Rosalie Garcia..... 22
Tussie-Mussie by Josephine Gray.....24
Dahlia Cuttings by Larry Sisk.....26
Wild and Weedy by Helen V. Witham.....28
Alice Rainford by Alice M. Clark.....31
Boat Arrangements by Virginia M. Innis..... 32
Orchids by Duane Bud Close..... 37
Ecology..... 38

CALIFORNIA GARDEN

Since 1909 Published Bi-Monthly by the SAN DIEGO FLORAL ASSOCIATION
Floral Association Building, Balboa Park, San Diego, California 92101
By Subscription $3.00 per Year
EDITOR AND BUSINESS MANAGER: Barbara S. Jones
ASSOCIATE EDITOR: Grace Brophy

Circulation: Penny Bunker

EDITORIAL BOARD: Virginia M. Innis, Dorothy Marx, Helen Witham, Rosalie Garica, Betty Cooper, Nibby Klinefelter, Stanford Roberts, William Gunther, Ethel Hoyt, Helen Ard

Advertising rates on request. Copy deadline, 1st day of the month preceding date of issue.
California Garden is on the list of publications authorized by the San Diego Retail Merchants Association. Entered as second-class matter, Dec. 8, 1910 at the Post Office at San Diego, California under the Act of March 3, 1879.

©February 1971, San Diego Floral Association. Printed in U.S.A. "We reserve the right to grant permission for quotation." Write to Editor at address shown above.

POSTMASTER: SEND FORM 3579 TO:
CALIFORNIA GARDEN MAGAZINE
FLORAL BUILDING, BALBOA PARK, SAN DIEGO, CA. 92101

The San Diego Floral Association

Founded 1907 — Incorporated 1910

San Diego's Oldest and Largest Garden Club

M-W-F (10-3) 232-5762

OFFICERS

President
MRS. DONALD A. INNIS
Vice-President
MRS. LEWIS KULOT
2nd Vice-President
MRS. WALTER BUNKER
Treasurer
DR. GEORGE W. BREMNER
Corresponding Secretary
MRS. EUGENE WIGHAM
Recording Secretary
MRS. EDITH L. STREET
Past President
VIRGIL SCHADE
Parliamentarian
MRS. LOWELL ELSON

DIRECTORS

Term 1968-1971
MRS. ROLAND HOYT
MRS. HANS MATTENKLODT
Term 1969-1972
MRS. EUGENE COOPER
MR. WILLIAM GUNTHER
Term 1970-1973
CAPT. CHARLES SPIEGEL
MRS. JOHN MARX

HONORARY LIFE MEMBERS

MRS. ANNE ROBINSON TEDFORD
MR. CHAUNCY I. JERABEK
MRS. ALICE MARY CLARK
MISS ALICE MARY RAINFORD
MRS. ROLAND HOYT
MISS ADA PERRY

EDITOR EMERITUS

MRS. ALICE MARY CLARK

You are invited to become a member of

The San Diego Floral Association

Fill in box with membership desired and mail with check to
San Diego Floral Association
Balboa Park, San Diego, Calif. 92101

Classification of Memberships:
Individual ..... $ 5.00 ☐
Family ..... $ 5.50 ☐
Sustaining ..... $10.00 ☐
Contributing ..... $25.00 ☐

Name_____

Address_____

Zip_____

As we start our sixty-second year of continuous publication, CALIFORNIA GARDEN has made some changes. All of Volume 62 will fall within 1971. (Still six issues per volume.)We are going to a new method of publication which we feel will be better for us. So, please bear with us as we volunteers get "into the swing"of the new techniques. We will be on time from now on, too.

We have talented new writers and editors as well as those who have been on our staff. We are encouraging young artists and writers to "lend pen to our pages", too. In fact, the future looks great!

Our readers are all over the world, primarily in semi-tropical regions similiar to ours. People who grow fruits and vegetables eat them, so we will include a few different recipes. People who grow flowers arrange them, so we will include flower arranging. Again in this new year we will be a rounded horticulture journal which is written in easy language but is based on sound scientific principals and facts.

Barbara S. Jones, Editor

SAN DIEGO FLORAL ASSOCIATION

PRESENTS ITS ANNUAL

FUN WITH FLOWERS

Symposium

"TABLE SETTINGS and HOME ARRANGEMENTS"
MRS. W. F. HIRSCH

"CHALLENGE OF AVAILABLE MATERIAL"
MRS. A. J. ANTOSICK

SAN DIEGO YACHT CLUB

FEBRUARY 19, 1971 10:00 - 2:30

LUNCHEON and DEMONSTRATIONS $5.50

Gladiolus:
grow and show

OVER FORTY YEARS of joy and frustration has led to the desire to outdo past records of previous seasons and to spread the gospel of gladiolus growing. Glad growing and exhibiting by hobbiest and grower and the sharing of information on the breeding of new resistant varieties and on improved cultural techniques, constantly improves them. The agricultural departments of several states and the Dept. of Agriculture at Beltsville, Maryland, carry on extensive experimentation and research and provide growers with all the 'up-to-date' methods for control of diseases, insects, and weeds. Research is expanding in Europe, Asia and Australia, too. Seasonal findings are freely distributed and published in various Floriculture magazines and in the N. American Gladiolus Council bulletins.

SOIL

Though not demanding, glads love a deeply tilled, workable soil which is rich in humus and slightly acid (pH of 6 to 6.5 is ideal). A little extra effort in soil preparation will reward the grower with show winners the following season. In late summer, as soon as the bulbs are dug, one should plant a green cover crop of rye or barley. This should be dug under as soon as it reaches twelve inches in height. This is very desirable if the soil is compacted of if the adobe type. Never use green manure or steer unless they are applied the previous season.

Ralph Kircher is a nationally known gladiolus judge and grower.

CLASSIFICATION

Glads are classified by the size of the florets into five distinct class sizes:

Class 100: Miniature
(under 2-1/2 inches)
Class 200: Sm. Decoratives
(2-1/2 to 3-1/2 inches)
Class 300: Medium
(3-1/2 to 4-1/2 inches)
Class 400: Large
(4-1/2 to 5-1/2 inches)
Class 500: Giant
(5 inches and up)

The National Classification lists fifteen basic color classes for show purposes. All shows using the No. American Gladiolus Society classifications list 15 basic color classes: White, cream, buff, salmon, scarlet, pink, red, rose, lavender, purple, violet (or blue), light rose and violet smoky, deep rose and violet smoky, tan including orange smoky, and brown including red smoky. These basic classes are sub-divided into: White with center markings; green; yellow-light and deep; orange-light and deep; salmon-light and deep; pink-light, medium and deep; rose-light, medium and deep; red-black; lavender-light and deep; and violet-light and deep.

Local shows usually condense their schedules into eight or ten color classes, eliminating the five size classes. In judging this type of show, the judges should be aware of the five size classes and judge accordingly.

The North American Classification lists 1220 varieties in the 1970 issue. Many of these are old time favorites that date back to 1918 but are still grown and still win blue ribbons at shows.

Ralph E. Kircher



Gladiolus which are recommended for easy growing in this area are:

WHITE
Glacier
GREEN
Lemonlime
Green Woodpecker
CREAM
Lady Bountiful
Landmark
YELLOW
Aurora
Limelight
BUFF
Apricot Delight
Patrol
ORANGE
Isle of Capri
Peter Pears
SALMON
Elf
Apricot Glory

SCARLET
- Victory
- W. F. Boerman

PINK
- Wings of Song
- Pink Prospector
- Spring Song
- Spic and Span
- Pink Majesty

RED
- Happiness
- Red Tornado
- Christmas Red

ROSE
- Miss Salem
- Pink Cheer
- Horizon

BLACK RED
- Oscar
- Last Rose

LAVENDAR
- Lavendar Masterpiece
- Lavanesque
- Lavanrose

PURPLE
- King David
- Purple Splendor

VIOLET
- Angel Eyes
- Star Sapphire
- Tropic Seas

ROSE AND VIOLET SMOKY
- Tan Glo
- Pompeii

TAN AND BROWN SMOKY
- Witch Doctor
- Damascus

Generally speaking, white and yellow are the strongest and the blue and the red are the weakest.

Bulbs are sold in the following sizes:

#1-1 3/4 inches and up
#2-1 1/4 inches
#3-1 inch

Many of these can be purchased at local nurseries at moderate prices. Several listed are "All American Introductions". These are patented and will be in marked containers. If you order from catalogs of bulb growing specialists, open the sacks immediately upon arrival.

PLANTING

Jumbo sized, flat bulbs can be split. Be sure to leave a good healthy eye on each portion. Often all but the biggest eye is removed. The cut sections should be dusted with sulphur to facilitate healing. (They should be stored for a few days before planting.) The eyes which have been removed can be dusted with sulphur and planted in sand. With proper care, these eyes can grow to produce spikes, large bulbs, and a quantity of bulbletts for further planting.

The husks should be peeled from all bulbs before they are planted. The proper planting depths are: Large bulbs--8 inches; medium bulbs - six inches; small bulbs - four inches. Bulbletts should be planted in trenches two inches deep. Because of the heavy soil in this area (and to make digging easier in the fall) plant all stock on a one inch base of clean sand. A tablespoon of bone meal or a special bulb fertilizer below the sand will help to produce a better balanced spike and bulb. The bulbs should be covered with sand and the hole filled with soil. If dry, the soil should be thoroughly watered.

After growth starts, the plants should be watered weekly; minimum quality demands an inch to one and a half inches weekly. As Glads have a tremendous root system, cultivation should be shallow. At the three leaf stage, a 5-10-10 fertilizer can be applied at the rate of a large handful to a six-foot row. Repeat when the spikes show in the foliage. A malathion solution can be used as a spray for pests and diseases.

If you plan to show your spikes, always remove side shoots. Be careful not to remove or damage husks as this will score against your entry. Check your plants each evening and if any spikes have a misplaced lower floret, manipulate it until it is facing properly. With a little practice this can be accomplished easily. Gladiolus can be planted twelve months of the year in Southern California but require a longer growth period in the winter months. Each variety requires a specific number of days from planting to bloom. Depending on the variety, this can be from sixty-five to one hundred days. Weather conditions can be erratic, so to insure blooms for a specific show date, divide your stock into three equal planting lots. Plant the first lot two weeks earlier than the calculated date, the second lot on the date calculated to meet the show date, and the third lot two weeks later. If one has a limited stock, use an eighty to eighty-five day period before the show for planting.

CUTTING AND SHOWING

When cutting spikes, be sure to leave four leaves on the plant to afford proper growth of the bulb and bulbletts. Cut the stem at an angle and place upright in a deep container of fresh water.

For showing, I cut my spikes with one to three florets open two days before the show. Until the show they are kept in a cool room, free of drafts. The water is changed daily. If the spikes must be transported, I place them flat in a two layer box. The open florets are interlaced with tissue paper to keep the petals from rubbing. The tip-ends are weighted down with several sections of water soaked newspaper to keep them from turning up at a 90 degree angle.

At all standard shows, containers are furnished for one and three spike entries and most will have paper-mache or plastic vases for five spike classes. To make a good showing, all spikes must be placed upright in the containers. They should be wedged with tissue paper or angled back to hold them so that the full florescence of the spike will be facing the judges. Large three spike entries are difficult to arrange, but the sacrifice of a few additional minutes to do it properly can mean the difference between winning or loosing that ribbon or special award.

DIGGING AND STORING

Note the date that the spikes are cut, because they should be dug in six weeks. In digging, take extra care in lifting the bulbs from the soil so as to not injure the bulb or scatter the bulbletts. It is best to dig several rows, placing each variety in a separate pile. Some drying must be allowed before the foliage is cut from the bulb with pruning shears. The bulbs should be dropped into a sack and dusted with a good bulb dust containing Captan and an insecticide before being placed on well ventilated trays or containers for curing. Do not use waxed milk-type cartons or the bulbs will rot. They should be stored in a well ventilated and shaded location for several weeks, testing at weekly intervals to determine when they can be easily cleaned. When cleaning, snap the old bulbs from the new, drop them into a sack, sprinkle with bulb dust, shake, and place in containers for winter storage. Discard any questionable bulbs. Onion sacks, old nylon hose, cardboard boxes, or any porous fiber container may be used for storing the bulbs. They should be placed in a dry location and checked several times during the dormant period. (Glads require a six week dormant period.)

Usually the winter months are planning months. By scanning numerous catalogues and checking the previous seasons growing records, one can determine what and when to plant. The bulbs, new tags, fertilizers, and sprays should be on hand so that when the first planting date arrives, one is ready to go.

Growing glads is a never ending sense of accomplishment. Each season is anticipated and prayerfully approached with the desire to make a better showing than previously. And, if Mother Nature obliges, this can be accomplished. The exultation of glad growing can never be experienced unless one exhibits at the shows. The satisfaction of winning, meeting former acquaintances, making new friends, and sharing and learning with all glad growers, repays one many times over for all the labors of growing glads.

Ed. Note: Although known as a bulb, a gladiolus is a corm. (Corm is a solid, thickened, underground stem.) Gladiolus are native to the Holy Land of North Africa. They are called "reeds of the desert" in the Bible.

fire retardant planting

George James

THE NATIVE VEGETATION which grows unattended in the uninhabited canyons and surrounds homes in the foothills and mountains in San Diego County becomes a dangerous fire hazard during the dry, late summer months. These growths, when fire does start, furnish fuel which ignites easily and burns quickly at a very high temperature. Combustible gasses are formed from this burning which may be blown by wind, or carried by drafts created in canyons by the fire, which may start new fires ahead of the original fire. Burning embers may be carried in the same manner, and these often cause new fires.

Often, in the interests of fire preveniton, or fire reduction, the native vegetation is removed entirely, and the ground left bare. In such cases, serious erosion can occur during the rainy period, and this is just as harmful as the damage.

George James is an experienced horticulturist and gardening teacher. He has lived in the San Diego area since 1913.

RETAIN NATIVES

When native plants are to be retained, the sides of buildings that are likely to be endangered by fire should be cleared of vegetation for a distance of thirty feet (by removing all plants and litter). Then plant grass or similar plants, which will furnish much less fuel than the native plants, and be an adequate erosion control. Another band, seventy feet in width, should be created outside of the thirty foot band. This is done by partially removing the native shrubs. Individual plants, or clumps of plants, are left spaced about 20 feet apart. All leaves and other debris should be removed and the area between the clumps should be seeded for erosion control. Once these bands have been created and the grass planted, dead leaves and other litter created by the shrubs that remian should be cleaned out, as this sort of material will burn easily and quickly, and to a degree, nullify the gains made by removing the extra plants. If a sprinkler system is installed, it can be used at intervals during the hot months, keeping the vegetation moister so it will be more difficult to ignite, and if ignited, it will burn slower. In the event of a fire, a sprinkler system will provide additional protection.

FIRE RETARDANT PLANTING

Observations of areas where brush fires have occurred over the past years have shown that certain plants are much more difficult to burn, and when they do burn, it is very slowly. A great many of the plants listed here as being fire retardant will need irrigation at least at the

FIRE RETARDANT TREES FOR SCREENS

Brazilian pepper	*Schinus terebinthifolius*
California pepper	*Schinus molle*
Carob	*Ceratonia siliqua*

FIRE RETARDANT SHRUBS

Carmel creeper	*Ceanothus griseus var. horizontalis*
Toyon or California Holly	*Heteromeles arbutifolia*
Lemonade berry	*Rhus integrifolia*
Gum Rockrose	*Cistus landaniferous*
Purple Rockrose	*Cistus villosus*
Salt bush	*Atriplex halimus & breweri*
Yerba Santa	*Eriodictyon trichocalyx*
Arabian scurf pea	*Psoralia bituminosa*
Coast salt bush	*Atriplex californica*
Green lavender-cotton	*Santolina virens*
Sunrose	*Helianthemum nummularium*
Wooly Yarrow	*Achielea tomentosa*
Creeping rosemary	*Rosmarinus officinalis prostrata*
Oleander	*Nerium oleander*
Myoporum	*Myoporum laetum*

Native cacti, yucca, and similar succulent plants are fire retardant.

FIRE RETARDANT GROUND COVERS

Iceplants, all kinds	
Algerian and other varieties of Ivy	*Hedra species*
African creeping daisy	*Osteospermon fruiticosum*

SEED GROWN GROUND COVERS

Smilo or Hardinggrass - Perennial grass
Barley - Quick growing annual grass
Annual Rye grass - Quick growing annual grass
Blando Brome - Annual, native grass
Birds-foot trefoil - Perennial legume

References used:

Landscape to prevent fire.
U. C. Agr. Ext. Service, Pub. AXT-64.

Fire resistant plants
U. C. Agr. Ext. Service, Pub. AXT-69.

Fire resistant plants
Leaflet by Brush Fire Safety Committee, 510 So. Spring St., L. A., Calif.

start, and some will need water all during the hot months, so some provision for irrigation should be included in the plans. If a sprinkler system, as has been mentioned, can be included, better fire control will be obtained. Plans for a fire retardant planting could include some trees or large bushes planted towards the outer edge of the planting They will tend to deflect hot gases and embers blown toward the dwelling. Shrubs of several sizes could be used to fill voids between the trees and arranged to present an attractive appearance when viewed from the house or garden. Prostrate and sprawling plants could be used to cover areas not otherwise covered to prevent erosion. The plants listed at the end have been selected for their resistance to fire. If you contemplate using them you should further research the plants needs, so a planting can be made that is suitable for the climate, the soil, and the requirement of your situation. Plants in any one area should have similar water needs.

If a planting one hundred feet in width is made of suggested fire retardant plants and a sprinkler system is installed, conditions may occur which would permit fire to cross this barrier. But, such a barrier does offer a great deal more protection to a home than if the home were surrounded by native vegetation, dry and full, with many years accumulation of dead plant parts.

Potted ointsettia lanting

AFTER YOUR POTTED PLANT has passed its prime, late January or February, do not water. Let the poinsettia go dormant for at least a month. When the weather warms, March or April, cut the plant back to six inches above the soil level and begin to water lightly. In two weeks new shoots will develop at places where leaves were attached. Plant out in a well drained and protected area (along a south wall). The soil should be rich in organic material. Water well after planting and then once a week.

Starting in June, the plants should be fertilized with a general food high in nitrogen at least once a mongh. During the summer months the plants need protection from aphids, mealy bugs, and red spiders.

On July 4 the plant should be cut back until six inches of new growth remains.

Poinsettias set buds when long nights occur in the fall. If the plant receives light at night it will be delayed in blooming.

The above are hints from Paul Ecke, Sr. on how to take care of holiday plants. Paul Ecke is a well known pointsetti grower in Encinitas.

now is the time

Nibby Klinefelter

Cultural suggestions from Affiliates of Floral.

BEGONIA SOCIETY

Now is the time

to start gradual pruning of febrous types--before new growth appears (watch for beginning buds). Do not prune too drastically or they will "bleed".

to continue feeding bedding varieties.

to beware of snails, particularly the very young snails who creep unobtrusively to the tender top growth to chomp away.

BONSAI SOCIETY

Now is the time

to graft corkbark black pine (as rewarding as it is rare) to ordinary black pine rootstock, using a side graft.

to withhold fertilizer--it's a quiet time with bonsai, although pines are starting to candle, and can be transplanted.

BROMELIAD SOCIETY

Now is the time

to give less water--keep just barely damp. However, allow them to revel in the rain--but not to drown in it!

to remember that Bromeliads need more light during the winter months.

to remove side shoots or "kickys" that have grown half the size of the mature plants, and to pot these separately.

CAMELLIA SOCIETY

Now is the time

to disbud to one bud on lateral branches for show flowers--pick off from the top to avoid sunbrowning and spotting from water collecting among the delicate petals.

to enjoy what is left of the small - blossomed single species, which started blooming in October.

DAHLIA SOCIETY

Now is the time

to be sure you've lifted all of your dahlia tubers and to carefully study the article on how to make cuttings properly written by the expert Larry Sisk in this issue.

EPIPHYLLUM SOCIETY

Now is the time

to let Epiphyllums rest. They need light to put on buds but do not care for full sun.

to watch that they don't dry out completely during winter rains--but don't let them drown, either.

FUSCHIA SOCIETY

Now is the time

to maintain watering.

to start pinching for

fuller plants--to prune in frost-free areas but postpone in colder areas until mid or late February.

to fertilize after pruning, using a mild, fish-type product (10-5-5).

ORGANIC GARDENING

Now is the time to prepare your compost for next Spring. Use grass cuttings, disease-free leaves, chopped prunings, vegetable parings and coffee grounds (the later are particularly good worked in the soil around roses.)

ROSE SOCIETY

Now is the time to plant the lovely choice bareroots.



ARBOR DAY AT QUAIL BOTANICAL GARDENS in Encinitas will be celebrated on Sunday, March 7, 1971, at 2:00 pm. Paul C. Hutcheson will speak on and display "New and Rare Plants from Far Places". Mr. Hutcheson was the senior botanist for many years at the U. C. Berkeley Botanic Gardens, has participated in and led many explorations into Peru and Columbus, is an active participant in many plant societies, and is the nurseryman of Tropic World, Escondido. A rare treat, indeed!

Guided tours of the gardens in all their springtime glory will follow the program. It's all free, too. (In case of rain, it will be postponed until the 14th.)



trim and prune ...

Jim Stalsonburg

THE "DORMANT SEASON" is that time of year when we give our plants their annual rest, and February is the period of their deepest slumber. However, this is not true for the gardener. If, by Act of Congress, we could put another five or eight hours in the day, we still couldn't find time enough to get all of our February chores done.

Thus, we look for new ways or improve the old ones to make the task less constrained. This, more than any other period of the year, is the time to prune and shape the things to come. Although the subject of pruning is inexhaustible, the basic principles are simple. It is important to know when, how, and what to prune--as well as the proper tools to use for the job at hand.

Unattended, Nature goes about this task in an unbalanced, almost reasonless manner, as can be evidenced by the tangled underbrush of our forests or a branch of one of our prize specimens lying on the ground after a heavy wind.

Weak branches die and drop off. Rubbing branches kill one another. Uneven or abnormal growth is easy prey to marauding winds. Nature's pruning is slow and haphazard at best. A quicker and more uniform result is desired, so we help Nature with our pruning shears.

The essential reasons for pruning are to promote stronger plants, sturdier growth habits, more pretentious blooms--along with controlling the shape, size and symmetry.

Dying or dead, broken, or diseased portions of a plant drain vitality. Pruning enables one to slow a plant to retain its basic structure and make certain it grows within prescribed limits. A thinning out of old wood helps a plant retain a new and fresh appearance, as well as a constant state of rejuvenation. By keeping a proper balance between the foliage above and the roots below the ground, more and larger blooms are usually the result.

We could continue in an endless barrage depicting the merits of pruning the "peach-fuzzed pussy-willow" of cutting on the "currant-berry creeper" in the specified manner, but time and space have precedence.

Let's stick to the fundimentals --WHERE and HOW to cut.

Any plant has a great will to

Jim Stalsonburg is Park Foreman of Balboa Park and an instructor of Ornamental Horticulture at Mesa Evening College.

live. The cutting operation leaves a wound which must be allowed to heal and callus over, otherwise infection may set in. All cuts must be clean and smooth. As in human, untreated wounds can cause serious complications and even fatal results. The first cardinal rule of pruning is to leave no stubs. Cut as close to the main trunk or branch as possible. In cutting a large or heavy stem or branch, use the three-cut method.

The first cut should be on the underside a short distance from the main stem and about one-third through the member. The second cut should be made slightly farther out, cutting from top to bottom all the way through. The third and final cut is to remove the remaining stub flush with the main stem.

Using the three - cut method guards against the large member falling prematurely, thereby ripping the bark or flesh of the plant, and it facilitates making a smooth finish on the final cut.

Any wound more than 1-1/2 inches in diameter should be given a protective coating of shellac, dark-colored house paint, or a commercially prepared compound. This prevents moisture favoring decay fungi from getting a foothold, and it is especially important with cacti and succulents because of soft tender flesh left exposed after a cut.

In any pruning operation cut just above the bud or areole that points in the direction that new growth is desired, exposing a minimum amount of tissue.

Cut at a slight angle. The healing process is performed vertically in the plant rather than laterally. Large wounds should be trimmed to a taper or oval shape to accelerate this process.

The proper time for pruning is as variable as a dollar pocket watch, but by - in - large, most shrubs, trees, and other plants prune best while dormant--just before the sap starts to flow. Doing it at this time results in quicker healing as the new growth is about to start.

There are some exceptions: Many flowering shrubs and trees should not be cut until after blossoming. There are some plants that cannot stand pruning at all, while others thrive on it. Nevertheless, one can't go too far wrong by always cutting out diseased, dead, or broken parts at any time --pruning the weaker of two rubbing or crossed branches that are developing wounds--cutting flush with the parent stem--leaving no stubs or ragged cuts--protecting large wounds.

Tools should be kept SHARP and well oiled. Use hand shears for cuts up to 3/4". The anvil type seem best for all around use. For cuts up to 1-1/4", use long-handled lopping shears. A 14" pruning saw is a mighty handy item to have around; it will take care of most of the average requirements, and don't forget a sharp knife.

Remember that clay pots dry out much faster than plastic pots and are much cooler since the evaporation of moisture through the walls of an unglazed clay pot lowers the temperature by seven degrees fahrenheit.

The picture below shows a cork screw willow rooted in water ready to plant. It takes approximately 1-2 months to root to this extent. One needs an extensive root system before planting.





CORKSCREW WILLOW, *Salix matsudana tortuosa* is a tree that grows well in Southern California. It is a small to medium tree. It prefers a moist location but this is not a must if properly watered.

The leaves of this deciduous tree are spiral and twist just as the branches. In the winter time when the tree stands bare, the twisted branches form an interesting silhouette. The trunk may be trained from a single stem, but the tree has a strong tendency to form many trunks.

This tree may be purchased at most local nurseries. It transplants easily and has a rapid growth. This endears it to flower arrangers who wish to regularly prune the tree for line material. It thrives on the pruning.

Like Pussy Willow (*Salix discolor*) it is easy to root. Left in a flower arrangement in a warm location or placed in a jar filled with water in a sunny window, the Corkscrew Willow will quickly form roots. Smaller branches seem to root and 'get going' a little easier than five foot long branches which some have been successful in rooting.

Spring and early summer are excellent times to start rooting a cutting.

Trees are available bare-root in some nurseries in the early spring. If you have a friend who is a flower arranger, this tree will likely be found in the arranger's garden.

Virginia Innis

Bare Root--Schmare Root

George Bremner

BARE-ROOT--SCHMARE ROOT! Anyone can dig a hole to put a plant in! After all, the soil is just a substance to hold the plant straight and retain the fertilizer and moisture.

Words of wisdom from a new immigrant to California from Iowa. How little did that neophyte gardener know of the difference between preparing the planting hole in rocks held together by concrete-like adobe, as compared to placing plants in deep loamy soil, where even "heeled-in" plants take off and grow.

No, I will not trade my area here for the "old country". I love it here. But the planting techniques <u>are</u> different. After the first year of scrawny roses and a tree that stayed the same size, the truth dawned that there might be something in the idea of digging a "ten dollar hole for a dollar plant". Sometimes the old laziness still pops in, or it seems time doesn't allow for a large hole, but the plant and its owner always suffer for the neglect.

Both the aforementioned adobe and the too sandy soils need well prepared places to receive the carefully selected stock for which you've spent your well earned money, the nursery grower has spent his effort, and the hybridizer his time. When a plant dies due to our neglect, it is not "just a plant", but represents a part of many lives.

But enough philosophy. Let's dig a hole!

First--LOCATION. Does the plant require sun? Shade? Or part of both? Are there trees, shrubs, or ice plant near enough to send roots out to sap all the nutrient? Should it be on a bank for very sharp drainage? Will leaf or fruit drop be too messy in this spot? After deciding that this is the spot--------DIG!

George Bremner is a dentist and an avid gardener. This successful immigrant gardener is also Floral's treasurer.

Second--SIZE OF HOLE. Frankly, I don't believe there is such a thing as too big a hole if the correct mix is replaced. For growth in a hurry, the larger the better. However, in the case of trees this fast growth may not be what you want, as it may get too much top growth before the trunk is large enough to support the weight and the whole plant will bend over or have to be supported by stakes for a prolonged period of time. This can be controlled by the amount of nitrogen in the fertilizer or mix. A good rule of thumb is to have the hole twice as wide as the spread of the roots and at least twice as deep as the distance from the nursery planting line to the root tips. In extremely hard soil be sure the hole is not round but has corners. This prevents the roots from circling as they sometimes do in nursery cans. Doesn't often happen, but can, and it is very discouraging to lose a ten year old tree due to a faulty planting. BE SURE THAT THE HOLE DRAINS. It wasn't bare root, but I lost a ninety dollar magnolia tree because I forgot to check drainage, and the roots simply rotted from standing in a puddle of underground water.

Third--PLANTING MEDIUM. Few of us are so fortunate as to have a good loam, so we have to create one, at least for the immediate area of the plant roots. All soils benefit from the addition of humus. The heavy soils need the aeration properties, and the sandy soils need the water retaining properties of the humus. While living in the beach area with sandy soil it seemed the mixes containing more peat were desirable, but since moving to the east San Diego area of the aforementioned concrete soil, the redwood mixes are more beneficial. The clay is very water retentive itself and just needs to be kept from

packing. Compost made from leaves, clipings, non-greasy garbage, etc. is great, too, but it is often unavailable and does have a tendency to break down faster than the redwood shavings.

Do not just dig a hole, fill with planter mix, stuff in the plant, slosh in water. and go. You've worked hard to get out the rocks and make this hole, so mix about 1/3 of the soil from the hole with an equal amount of your chosen planter mix and dig some of this into the bottom of the hole. Now fill the hole half full with this half and half mix. Tamp firmly. This will form a transition area for the newly forming roots. Somewhere in here bury one of two of the "pills" of fertilizer. Bury so the roots won't be right on them. It isn't supposed to burn, but the roots just might, and it'll only be a few days until the new feeders will get to it anyway. These are supposed to last a year. Maybe they do, but I like to add a tad of fertilizer a few months later, anyway. Perhaps I'm just too old-fashioned to make so abrupt a change. At any rate, they surely are a boon to those of us who tend to be irregular in fertilizing. If blood-and-bone or something else happens to be your bag, use it instead, but easy on the high nitrogen at this point.

Now, back to the plant. Add an equal part of pure mix to the half and half remaining. Make a mound in the center of the hole to spread the roots of your plants over. For all plants with bark, and many others, do not plant deeper than the original planting line. Check with your nurseryman at time of purchase if in doubt. Probably more plants are lost to planting too deeply than to any other single cuase. If the planting line is too high after spreading the roots over the mound, lower the mound and, if necessary, dig out more at the periphery of the roots so they are not bent upwards nor jammed into the soil. If the line is too low, add more mix to the mound to bring the plant higher. Better to plant too shallow than too deep, for a plant will grow when the roots are showing but not when the cambium layer is rotted from planting too deeply.

Now that the roots are spread and the planting depth established, fill in around the roots with the remaining soil-mix combination. Work in well with your fingers as you go, then when the hole is nearly full, flood with water and tamp with a shovel handle or small stake. Use care not to bruise roots, but work out air pockets that may have developed directly under the plant. Finish filling the hole with mix. If short of the soil-mix, complete the job with straight mix. It's a great mulch. The planting depth should be checked again to be sure there has not been any settling. If so, be sure to raise it, for an extra ten minutes now might mean the life or death of this plant. In case of all budded palnts, be sure the union is well above ground level. (This was a switch for the Iowa rose grower!)

Slope the soil gently away from the plant, and build a ridge of soil about two inches high completely encircling the plant beyond the outline of the planting hole. The reason for this is to keep water from the stem of the plant and to moisten the original soil so the roots will penetrate. Mulch with shavings, compost, bark or gravel. Flood with water again.

Now keep moist, stand back, and watch it grow. Don't fertilize until growth is at least 4 inches long for most plants, and then only about 1/4 strength for the first year because you already have the pellet buried. Roses can use more. Check with a member of the rose society for this.

After looking this over, it seems it's exactly what I do for canned or ball and burlap material too. Only big difference is that there is no spreading of roots for the latter two. Just cut and remove the cans for one, cut the burlap and fold back for the other.

Of course, all bare root stock should be pruned before planting. Trim off broken, rotten, or dead roots. Your nurseryman will show you how to (or do it for you) prune the top back rather severly. Don't faint

continued at bottom of next page-

Winter Iris

Thelma Carrington

Photos by Mike Maxwell



Upper petals, "standards", remain clasped in a cone on first day. Iris is about two inches in diameter.



Stance lowers by third day. Note brilliant "haft" marking on lower petals, "falls".

MOST FOLKS THINK that springtime is iris time--but they don't know about the winter iris. The winter iris is a real nonconformist; it differs from ordinary irises in many ways; included among its many odd traits is the fact that it absolutely refuses to bloom in the springtime--when irises are supposed to bloom.

More than that, it never grows the "beard" which is a familiar feature among garden irises. It never grows a real stem; each blossom has an elongated hollow perianth to substitute for a stem. Its leaves look more like tall rush-grass than like iris foliage. Although this interesting plant, botanically speaking, is just as truly an iris as is any ordinary garden iris, it refuses to "cross" or hybridize with garden irises.

The winter iris, with all these idiosyncrasies, is a child of nature. It was not

Thelma Carrington is an iris grower of note and a frequent contributor to California Garden.

(Bare Root--Schmare Root cont.)

when 2/3 of your nice full peach tree lies on the floor. 'Twill be healthier later for it. Most roses will not have more than three stems. A fig or apple will just look like a stick in the ground. But planted in a well prepared place, watered and fertilized correctly, the first years growth is lush, healthy, and in correct proportion to the root development.

There are other ways to plant bare root, but you are sure of success when good stock is planted correctly.

artificially contrived, hybridized, and developed by man in a green house. On the contrary, fossils show that its beautiful blossoms graced the shores of Europe and Africa even before there were people to admire it. It still grows wild in Algeria and in the eastern Mediterranean area. Botanically, it properly is designated as *Iris unguicularis*. However, most people who already have it in their gardens call it the winter iris or the "stylosa" iris.

The plant thrives beautifully in southern California because the climate here is very similar to that of its native habitat. Because it blooms during the winter, when other irises are mostly dormant, the winter iris ought to be in every garden in this area.

In local gardens, this iris bears a succession of flowers from October until March. The blossoms are predominately lilac colored, but the lower petals, or "falls", have markings and reticulations of lavender and white and yellow. Each blossom is held up by a perianth tube about six to eight inches high, but the foliage usually reaches twice that height, leaving the blossoms partially hidden in the clump.

This dainty iris is valuable as a cut flower. Arranged in a low bowl it is a beautiful centerpiece. Gather flowers in bud stage by pulling (not by cutting). If single buds with perianth are gently separated from the plant at ground level by pulling, they will last better in water than if cut, the full length of the perianth will be obtained, and adjacent new smaller buds will not be damaged. Flowers will open the next day in water. In a cool room the flowers will last for three days. A lasting procession of more buds will follow to replace those which have been pulled from the plant.

Any ordinary garden soil, well drained, is adequate for winter irises. The addition of some lime, and an application of organic liquid fish fertilizer, will stimulate an extra burst of mid-winter beauty and fragrance.

The fragrant buds and blossoms of this iris are just as attractive to slugs and snails as they are to human admirers. The blossoms will never adorn your parlor table if during bud stage they become midnight snacks for slugs. So give the plant a periodic sprinkling with snail bait; pellets are best for snails; the granualr form is most effective for slugs.

Good garden effect is achieved by leaving the foliage on the plant; a light pruning of straggling dry leaves and foliage during the summer will be sufficient. Too severe a pruning of cutting of foliage may result in loss of plant. A light pruning will groom the plant without sapping its energy. No summertime care is needed; after blooming, the plants do not require any attention; in fact they welcome a rest. Once established, each plant increases into a large clump.

Small divisions of root-stock may be taken from the outside edge of the clump, for replanting, anytime of the year; a particularly good time would be in April, after the bloom season is completed. Set divisions at least twelve to sixteen inches apart to give room for clumping. A clump may be left in place for many years; it will continue to grow and thrive with little attention flowering beautifully and cheerfully rewarding you a thousand fold with its graceful simplicity and delicate beauty.

If you have a friend who is a member of the local iris society, perhaps you might exchange something from your garden for a division of his clump of the winter iris, Commercial nurseries in this area do not yet stock the winter iris, but a few specialty mail-order nurseries elsewhere do. You can get three divisions of it, postpaid, by sending $2.25 to Laurie's Garden, 17225 McKenzie Highway. Route #2, Springfield, Oregon 97447. Or (if you have the patience to wait two years to get blossoms from seed), you can get a packet of winter iris seeds by sending 25¢ and a pre-addressed, pre-stamped return mail envelope to the American Iris Society Seed Exchange, c/o Mrs. John Hardy, 296 Hunsaker Lane, Eugene, Oregon 97402.

May your future winter seasons be brightened with iris blossoms.

Creative Flower Arranging

Adrienne Green

WHEN GATHERING FLOWERS from the garden, it is a good idea to cut them when the sun is not at its warmest - late in the afternoon or early in the morning. As you know, cut flowers need water to stay fresh, so take a pailful along, and as soon as you cut a stem, pop it into water. As you cut, select flowers in different stages of development; this variety will add interest to your arrangements. When you come into the house, sort your kinds and colors and put them into separate containers of deep water. (Large juice cans are good for this purpose). Having the kinds sorted will make arranging easier later on. Leave the materials in a cool place free of drafts for a couple of hours or overnight.

Adrienne Green is a Senior Judge and an Instructor of Artistic Design, National Council of State Garden Clubs' Flower Show Schools.

While the flowers are conditioning, assemble your mechanical aids; Containers, shears, needle-point holders, floral clay, and Oasis (handy for a mass arrangement).

To help you decide which container to use, you might try holding your containers in turn near your cut flowers. This is how



we discovered that containers we had around the house, not originally intended for flowers, could be used. In the pictures a souffle dish holds the breakfast table arrangement; geraniums are attractive in an old copper mold; and an old ironstone vegetable dish is roomy for the mass design for a dinner party. For possible containers, look over your silver and pewter as well as your casseroles, baskets, and cooking utensils. A plain container that does not offer too much competition with the flowers is usually easier to use than a highly decorated one. Neutral containers such as gray, black, and soft green ones are suitable for any color flower.

Now you are ready to begin your arrangements. Place a piece of paper, a sheet of plastic, or an old cloth on the table to help in tidying up later. Plan to sit down to arrange. This is a creative hobby, and you should relax and enjoy your time with flowers.

Like other forms of artistic expression, flower arranging is guided by the elements and principles of good design. In brief outline we will review these and relate them to flower arranging. The design elements that we think about are space, line, form, pattern, texture, and color. *Space* refers to the area your arrangement is going to fill. An arrangement is like a piece of sculpture. If you are doing a tall arrangement, it will look best in a verticle space. On the other hand, a low arrangement would be better suited to a horizontal space, such as a coffee table. Take the container and a couple of branches or flowers to the space you are planning to fill, and do a rough sketch by putting the tallest placement you expect to use in the container and standing back to evaluate the relationship.

Line refers to the major direction in which the eye will travel in your design. In flower arranging we establish this movement by using flowers or branches. For example, the eye in the geranium arrangement travels upwards more than it does in the white mass design. By combining more than one piece of plant material, the arrangement takes on *form*, or shape. You will find it helpful in the beginning to establish a general outline or shape with two or three pieces of plant material. (The form of the daffodil design is a pyramid; the white arrangement is a spreading triangle. The geraniums suggest an oval.) Then fill in this shape with your other flowers. As you work, look at your design against a blank wall and see its silhouette, or *pattern*. This is made up of solids and open spaces. (The open places around and between the flowers are as important as the solids.) We find that certain flowers go well with certain others and with certain containers. This characteristic is often a question of *texture*, or the surface quality. For example, flowers such as roses are pleasing in fine alabaster, glass, or silver. Coarser zinnias and sunflowers are happier in sturdy earthenware or wood.

Color is perhaps our most dramatic element to think about. It is easier for a beginner to use flowers of one color or closely related colors. In mixing a profusion of flowers, group the colors, and plan to repeat one hue more than any other.

In addition to understanding the design elements of space, line, form, pattern, texture, and color, we need also an understanding of the design principles that guide any creative artist. These are proportion, scale, balance, dominance, contrast, and rhythm.

Proportion means the relationship of one part or area of an element to another; for example, the amount or number of flowers we are using in relation to the container, the arrangement in relation to the amount of space it will fill, and the amount of flowers in relation to the foliage. As a general guide, remember that equals in proportion will usually be less interesting than unequals.

Scale, closely related to proportion, refers to relative sizes. We think about the size of a container in relation to the flowers it will hold. A tiny goblet, for example, would obviously be too small for half a dozen bearded iris.

Balance means visual stability, and is affected by both scale and proportion. Draw an imaginary line down the middle of your arrangement. There should be equal visual interest on either side. The arrangement should not lean backward or tip forward; it should not appear flat, but have depth. The eye should be able to move easily from top to bottom, side to side, and in and out.

To help achieve depth balance, as you fill in your outline, gradually move outward from your first and most important placement. As you build, use the lighter forms at the top and the heavier ones low. Otherwise the arrangement may appear top-heavy. Also, as you work, place leaves of small forms behind the larger ones. This too will help you achieve pleasing shadows and rhythm.

Balance is described as symmetrical or asymmetrical. In symmetrically, or formally balanced, designs, visual equality is achieved through equal distribution of materials on either side of a middle line. Asymmetrical balance is often called informal balance. The materials used on either side of the imaginary middle line are different, yet there is a feeling of equilibrium achieved through placement.





Dominance and *contrast* are our next design principles to consider. Just like a piece of music, a flower arrangement should echo one theme. One texture, one color, one kind of flower should be important. This helps to give the design unity and oneness. We can easily see how to accomplish dominance: Through repetition. Too much repetition, however, might result in monotony or oversimplification. For this reason we introduce contrast or variety. Even when designing with one kind of flower, such as geraniums, we use the green foliage as contrast in color and form.

Rhythm is another important design principle that applies to flower arrangement. This means that the eye moves easily and comfortably through the design, from one part to another, from one color to another. One way to establish rhythm is to place a few small forms on the outside and gradually move to a heavier concentration. Curving lines are more rhythmic than straight ones. We establish rhythm too by repetition of shapes, of colors, of sizes, of lines. Depth is also important in the achievement of rhythm in an arrangement. To gain depth, place some flowers forward, others back, some in profile, some full-face.

These design hints will help you achieve success. Use them as a guide to create your own arrangement.

(This article was reprinted from FAMILY CIRCLE by permission of the editor. The photographs are by George Nordhausen by courtesy of Family Circle magazine.)



THE BOOK SHELF

GARDENS IN GLASS CONTAINERS By Raobert C. Baur. Hearthside Press, Inc. N. Y. c1970. $6.95. 191 pages.

This is a great how-to book for indoor gardeners. There are many drawings and photographs illustrating the suggested gardening projects for glass containers as various as bottles, candy jars, cider jugs, and Wardian cases.

If you haven't heard of a Wardian case before, chapter one goes into the origins of glass gardens and tells of Dr. Nathaniel Ward's discovery that plants could be transported on journeys lasting for months in sealed glass cases.

Mr. Baur tells us that collecting the containers is half the fun. Design, plant selection and rocks or other materials are discussed in detail. After the garden is planned, chapter four tells how to plant it. A tool kit for planting bottles is suggested and includes a dowel, wires and a pea shooter.

Although gardens in glass flourish with little care, maintenance procedures are given. Plants are grouped in lists according to temperature, light and soil requirements.

In the chapter on terrariums in bloom, instructions are given for bringing budded twigs into bloom, blossom bowls and cut flowers or potted plants in show-off terrariums.

There are terrariums for holidays and gifts and terrariums for nurseries for seeds, cuttings and bulbs. There are aquarium gardens with or without fish and vivariums with turtles.

The last section of the book gives a plant encyclopedia covering garden plants, house plants and woodland plants. An extensive source of supply list is given, and the book is indexed. This is a good book for any gardener's shelf.

Reviewed by Doris Blick

FLORAL ART FOR RELIGIOUS EVENTS by Leon J. Tolle, Jr. Hearthside Press. c1969. $8.95 192 pages.

According to the subtitle, this is "a definitive manual of tradition and design for worship, weddings, funerals, and other occasions." The first half of the book gives the traditions and environments of Eastern Orthodox Churches, Roman Catholic Churches, American Protestant Churches, and the Jewish temple. The liturgical calendar is given for these various churches.

The second half of the book is called the florists' work book. Here consideration is given to the role of flowers and the florist in ceremonies and events dealing with baptism, weddings, funerals and other similar events.

An interesting compendium of symbolic meanings of plants and flowers is given at the end of the book. The book is indexed and illustrations include color plates and black and white photographs. Anyone interested in arranging flowers will enjoy the inspiration and information in this book.

Reviewed by Doris Blick

FLOWERS IN THE GARDEN By Dorothy Jacob. Taplinger Pub. Co. 1969. $4.95 239 pages

A personal reminiscence of seventy years of gardening is the sub-title of Mrs. Jacob's book, and it very well describes the book. Anyone who has already read "A Witch's Guide to Gardening" by this same author knows her knowledgeable and delightful way of writing about growing things. Here she links this love of gardens with memories of both personal and world events during the seventy years she has been gardening in England.

There are black and white photographs of gardens she has planned in her homes. The symbolic names of these gardens give us a clue to their owner's memories of them. There is Heartbreak Hall, an old Tudor mansion set in thirteen acres of a wooded, ancient estate and Comfort Corner, a small Regency farmhouse tucked into a half acre of an old orchard.

The book is divided into seasonal section with appropriate cross references to periods of Mrs. Jacob's life. Thus spring refers to the period from 1889 to 1914. In those days, Mrs. Jacob tells us "The garden . . . was dug with a spade. The lawn was cut with a . . . hand mowing machine and weeded with a daisy spud . . . It is good to be able to remember life when its pace was measured on foot, or by horse, not by super-jet, or nuclear fusion."

About summer, she says, "in July the trees are all just a solid green curtain. . . It is now halfway through the year. . . an admirable moment in which to pause and look at the garden. It has been said with much truth that no one ever sees a gardener's face: it is always knitted to the ground. A raised rump is all he ever presents to the world."

So on through the seasons Mrs. Jacob takes us with a bitter-sweet autumn memory of barrage balloons floating over her September garden to the winter solstice which she reckons as beginning for herself on her seventieth birthday.

This book offers great satisfaction to the reader. If you buy it for a gift, you will want to read it before sending it on its way.

Reviewed by: Doris Blick



Anywhere to the West is a "Seaweed Collecting Garden." This picture was taken from the roof of University Hospital.

PHOTO BY BETTY MACKINTOSH

My Seaweed Garden

John E. Miller

AT BEST, LINCOLN CITY, OREGON is not the easiest place to raise vegetables, but I did in an area that had been under sea water the year before. I knew I needed fertilizer, and as I didn't have the money for fertilizer . . . this is what I did. Any fresh brown seaweed that washed up on the beach I cut into convenient lengths, put into a bucket, carried to my garden, and dug about a foot deep into the soil. Giant Kelp and Bladder Wrack were among the ones that I used. (I have since learned that any

John Miller experiments in his garden with new methods and plants. He grows worms at his home, which he calls "Wormy Acres."

green sea grasses or seaweeds would have been all right, too.) I grew kolrabi, celtuce, peas, string beans, turnips, carrots, broccoli, lettuce, tomatoes, radishes, squash, etc.

I have learned that seaweed used for agriculture goes back many centuries. It has a long history of use for human consumption. Today it is used in many mixes and blends to keep various animals healthy. In fact, it has been used so extensively that even as far back as 1681 the French Court issued a Royal Decree regualting the conditions under which seaweed could be cut. Today there are regulations in the United States controlling the cutting of seaweed.

Seaweeds are found near or on top of rocky formations on the ocean floor in relatively shallow water. Seaweed refers to any plant that grows in the ocean, but scientists place most of the sea plants in one group, algae. (this includes everything from giant kelp to minute phytoplankton.) They are classified into large groups by their color, red, green or brown. Most of the large plants we see and know as seaweed are anchored to the bottom and when they reach maturity they die and break loose. (Sometimes it is just part of a plant.) A storm or a strong current will bring the seaweed into shore where it will be cast on the beach at high tide. Seaweeds contains minerals; silica, copper, manganese, iron, sulphates, chlorine, magnesium, calcium, potassium, iodine, aluminum, phosphorous, etc. A sample of rockweed was found to consist of 15% moisture, 1.4% fats, 10.5% protein, 51.9% carbohydrates, 6.1% fiber and 16.1% minerals.

When I moved to San Diego I continued my seaweed gardening. I, bucket in hand, go down to the beach (with burlap sacks for the dry) and with a large sheath knife cut the seaweed into convenient lengths for handling. (A large plastic trash can back at the car is a must for the transporting of my collection.) My garden has shown remarkable results with wet seaweed planted about six inches to a foot deep. I didn't wash the sand or salt off either! If your soil is well supplied with humus, you don't have to wash the seaweed; but if your soil is low in humus, wash it.

I tried to kill two large tomato plants with too much wet seaweed. . . . couldn't be done. I raised beautiful tomatoes without a blemish and put them on display at the Southern California Expo. I put a large card on them that read "These were raised in clay and adobe soil (no drainage, hardly). No poisons or chemicals. I used rabbit manure, seaweed and some sand."

Seaweed can be used for compost. Fresh chopped weed should be immersed in warm water 100 to 180 degrees and soaked overnight. A 200 pound heap of seaweed rots readily when chopped and will heat to 100 degrees within two days. The water treated is a better compost maker. If limited quantities are available. seaweed is a good compost starter. Two pounds of chopped seaweed soaked in one gallon of hot water and poured over the compost heap is very satisfactory. The compost should be ready for use in about six weeks.

Too little is known about foliar feeding. I have experimented with a blend of fish emulsion and liquid seaweed* (well strained so chunks won't clog the sprayer) as a top spray every two weeks. I used 2-4 tablespoons of each in a spray bottle hose attachment. I apply it to shrubs, trees, flowers, vegetables of all kinds, lawns, anything that grows.

Seaweed can be used as a garden mulch or burned and the ashes either sprinkled on or dug into the ground.

Some seaweeds have higher nitrogen contents than stable manure. In fact, a ton of seaweeds contains an average of 7 pounds of nitrogen, 2 pounds of phosphoric acid, 22 pounds of potash and 400 pounds of organic matter. A good fertilizer, and common garden pests don't like it, either. Be an organic gardener with seaweed!

*Cut well washed giant kelp into small pieces. Add enough water to liquify in blender. Let stand 48 hrs. Strain. Use immediately, will not store well.

BIG, SMALL and Rare



Rosalie Garcia

GETTING INTO A RUT in the vegetable garden is not necessary. Beans, peas, and carrots are staples, but just as some additions to the meat and potatoes in the menu make a meal a treat, so will some new vegetables add excitement and gourmet touches to the menu and garden.

There are really no new vegetables, as there are no new roses. New hybrids with improvements in size, flavor, and texture are introduced every year and are accepted as new. The seed racks in nurseries will have a few of them, but because people are so "sot" in their ways and stubborn about trying new edibles, it's not profitable to stock many of them. Seeds and plants are available in specialty seed houses throughout the country. They cost twice as much and should be ordered from houses that grow in climates as near your own as possible. The specialists in unusual and rare are the French and Japanese, and the hybridizers and improvers are the American scientists, who work mainly to get hardy strains for commercial planting. The Chisese discovered domestic culture of vegetables by cultivating the wild ones. Travelers took them to other parts of the world and inspired peoples to adapt their own wild ones. Chinese cookery was adapted by the Italians, then by the French who still export their art to the Western world. A French meal will feature vegetables delicately steamed and seasoned and served as a separate course. The average American restaurant often makes a disgrace of vegetables, serving mushy grey peas, limp and tasteless green beans, and carrot cubes from which all taste has been extracted. They can make broccoli seem poison and repellant. The Japanese quick-fry in a tempura batter that keeps the flavor and crispness in, or adopt the Chinese method of stir-frying in a little oil and steaming them a few minutes so that flavors are blended. The French barely steam them and serve with a sauce that enhances as well as preserves the flavor. The trick is: don't over cook. Southern style slow boiling with fresh or cured pork makes a meal with the accompanying corn bread, but only certain vegetables like turnip greens, very mature green beans, shelled peas, and beans respond to such treatment.

What are some new varieties one might add? Don't go overboard and plant all new ones, for some may not adapt. Some experimentation with soil and fertilizers may be necessary before one is successful. After all, something to eat is the goal, and being an experimental gardener is not the average grower's "cup of tea". One or two each year is enough.

For the salad garden there is ASPARAGUS CHICORY, a new variety of endive chicory, which is an Italian favorite. It sends up thick shoots that are crisp and taste like asparagus, and can be cooked and served with butter or hollandaise sauce. Also a CABBAGE LEAVED DANDELION whose rosettes spread two feet, but are more tender if tied up to bleach the hearts, as one does curly endive. ELEPHANT GARLIC, a fairly new variety of garlic that is much milder than the usual cloves, gets to be as big as an onion and can be pared very thin to toss in salads. The ARTICHOKE GARLIC which puts up a bulb that looks like an artichoke so the cloves can be removed one at a time, leaving the rest of the bulb intact, is strong flavored, plump and easy to peel. It is a sport of the familiar bulb garlic.

If cucumbers have been off the list, there is now a BURPLESS one, long, slim and green and a prolific bearer. A carrot new to us is the French introduction CARROT DE MEAUX, a long slim crisp one with unusually ferny foliage that can mix with the flowers, and is ideal for a raised bed in which the soil is two or more feet deep with humus and sand. A squash that is as ornamental as it is edible is one that was awarded the Squash of the Year of 1969. The GOLDEN NUGGET is a round deep orange winter

Rosalie Garcia has been growing vegetables "all her life".

variety that is very prolific and needs plenty of room, good drainage and protection from mildew. Baked or steamed, it has a deep rich flesh, a slightly bitter tang, needing a dash of sugar to bring out its best flavor. The common old sugar beet has been toned down and bred with the table red beet until the GOLDEN BEET has resulted. It is sweeter and more tender than the common red beet and the tops make greens more tasteful than spinach. Seeds of this one can be found in local seed racks.

There is no end to the list of vegetables which can be listed as rare, because they are so seldom grown. Many are as old as Time and have been grown in other countries for centuries, but are rare in our gardens. We even see some of them in our supermarkets. Take CELERIAC, often called turnip rooted celery, because it is a root and tastes like celery. One can buy the roots, cut off the tops and plant them to grow more roots. The root is steamed to be eaten with butter, pepper and salt, or sliced very thin and tossed with salad.

A nice hybrid called CELTUCE is a good blend of lettuce and celery. If eaten when the leaves are young and tender, it tastes like celery but has the texture of lettuce. It is a fine source of Vitamin C, if oranges do not agree with the metabolism. It is slow growing and should be planted early so it will mature before hot weather.

White varieties of common vegetables abound, such as the white tomato, WHITE BEAUTY. It is white-fleshed, low in acid (hard to grow) but is delicate and delicious. A white zuchini, a French hybrid called WHITE COURESE, is delicious fried and is almost without seed and has a very tender skin. White and yellow egg plants are fine textured, round and egg-shaped with paper-thin skins and are fine for frying or baking whole. They are good pot plants, and if planted in late summer, make pretty house plants in the winter. There is even a white beet, PACIFIC WHITE GLOBE, which has to be petted along but is a tender and delicate novelty.

One can get away from spinach by planting TAMPALA, a leafy vegetable that cooks as easily as spinach but does not have that oxalic taste. It does not mind hot weather, so one can have greens all summer.

The bean family has infinite variety to add to the BLUE LAKE and KENTUCK WONDER, the old staples. Soy beans are a neglected addition, even though they are common as animal food and are a great commercial crop for oil and feeds. Health Food stores are about the only source for them, because many do not know them as one of the highest sources of vegetable protein. They are slow growing, taking from 90 to 100 days to produce, but there are varieties that are early and late, and planting both kinds will produce a constant crop. These are bush beans, and one needs space for several rows, but they are most rewarding. Pole varieties of beans are numerous, including LIMAS, ROMANO (the broad Italian) and a black-seeded one that is sold in the Health Food which makes the fine black-bean soup, considered a gourmet dish. Probably the tops in beans is a French Staple of the Flageolet type, VERT SUMA, which can be eaten green-shelled or dried but is considered at its best as green-shelled. It accompanies roast lamb in France, just as Yorkshire pudding goes with roast beef in England, or a baked potato with steak in this country.

The ever diminishing space in urban living was first noted by the Japanese who started hybriding down in size, so a whole roster of midget vegetables is now available. Generally texture is refined and flavor preserved, so that many of our old favorites can be grown in tiny plots, in flower pots, and boxes. They respond to rich loose soils, and frequent application of liquid fish fertilizers. Because of small root systems they can be planted close together, and new seeds can be put in as soon as plants are pulled out. They have captiviting names denoting the diminutive, such as:
LITTLE LEAGUE CABBAGE, so small that the soft-balled heads can be cooked whole. They have short cores so they will stand longer without becoming tough and stringy-seldom more than four inches across.
TOM THUMB LETTUCE is a butter-head type, small enough for one head to a serving. It is medium green and crumpled. It is an early and a cool weather type.
TINY SWEET CARROTS are the stubby Chantenay type, only about three inches at maturity. At one inch they area gourmet morsel.
BABY BLUE HUBBARD SQUASH is like the big winter variety, but never gets over six inches in diameter and no longer.
TINY TIM TOMATO is not quite as big as the commercial cherry type, but has a tender skin and a much sweeter taste.
GOLDEN MIDGET CORN grows about three feet tall and has both white and yellow grained ears that are no more than four inches long and are very sweet.

EARLY MIDGET WATERMELON, both red and yellow fleshed, one should try to grow. Seldom do they exceed six pounds and many are smaller. The beauty of them is that one can cut one, which makes about four servings, and eat it all when it is at its best.

There are midget peas, egg plant, cantaloupes and cucumbers, a whole garden in miniature waiting for those with only a small garden space or some pots on a balcony.

Plant something different this year. Choose from the new, the rare or even the small one for an exciting adventure.

Let's Make a Tussie-Mussie

Josephine Gray

TUSSIE-MUSSIE is not a word which I made up. It was already old when, in 1629 John Gerard wrote "there be some flowers make a delicious Tussie-Mussie or Nosegay, both for Sight and Smell." Those droll and jaunty little words were lost for a long time, but gardeners are the most inquisitive of people and when not digging in the earth are digging into books, and so in ancient herbals and old garden books found them again. Examining their roots it was discovered that the old English form 'tussymose' was allied with 'tasty, a bouquet, and 'tutty', a nosegay. And there you have it; a tussie-mussie is a small handful of flowers for the nose.

Bold and flamboyant blossoms are never used. The charm lies in fragrance and delicacy, and mignonette, clove pink, violets and that exquisite little blue bulb, Glory of the Sun, have it. (The latter goes by the jawbreaking botanical name of Leucocoryne.) Other small blossoms which may have no scent other than the earthy fragrance they brought with them when they came through the soil, are irresistible. Snowdrop and Snowflake with the little green tip to each petal. And who could deny the saucy Johnnie-jump-up? It has half a dozen old fashioned names, among them Ladies' Delight. Add a bit of linaria and a sprig of purple sweet alyssum to your handful and give them a frill of fern-leafed tansy or velvety peppermint tomentosum geranium and you have a tussie-mussie fit for a queen. In fact, Queen Elizabeth II did carry one to her coronation, and I suspect that many a time Good Queen Bess carried one with rue in it to ward off evil vapors.

Josephine Gray researches, grows, and uses herbs. Her garden in Rancho Santa Fe is a delight.

Herbs are among the most delightful things with which to fashion a tussie-mussie, for there is never a time during the year when one or another of them is not available. Little spring blossoms come and go, but there is always thyme, often with its lavender-pink spike to add color, and marjoram with minute white flowers loosening its knots. I walk among my little herb plots and pinch off a sprig of silver thyme and one of its gold neighbor. In January and February the golden thyme begins to attain its most shining golden beauty, and I am lavish in the use of it. Because new plants are not always available at nurseries I begin layering them at this time by pegging down long strands with big hairpins made from a coat hanger. Then I find winter savory, dark green and flossy, and a small chartreuse head of rue among its blue-green foliage to add to my collection. One or two small paddle shaped leaves of costmary which leave fingers smelling spicy and add variation in shape and texture, are added, and perhaps a bit of gray lavender or spiked rosemary. One or two coral bells or a blossom of anthemis or agathea will make the tussie-mussie ready for its Elizabethan ruff of gray santolina.

In the old days at Covent Garden the flower seller bound the stems of their tussie-mussies with long strands of tough grass, but it is more convenient if not so romantic for us to use elastic bands or florists' wire. If you are taking the tussie-mussie to your luncheon hostess, cover the

stems with silver foil or green florists' tape and put it through a small lace paper doily. To keep the paper from tearing I make a cross of scotch tape across the center and cut a smaller cross through it for the stems to go through.

A tussie-mussie is an endearing little bouquet to take to a hospital. Nurse as well as patient will bless you, for it can be put into a paper cup on the bed table without further fuss. A dozen times a day it can be taken up to look at or to rub between the fingers, whence, the old herbalists tell us, it "comforteth the inward senses!" If you give a handful of sweet herbs to a blind person, what could be more comforting to his inward senses?

For your own amusement, contrive one of these little fugues of fragrance by progressing from the strong clear note of oregano to the more delicate marjoram in a higher key. Or make a whole succession of thymes, (there are some fifty of them): Spikey gray-green French, lemon, golden

PHOTO BY ANNE GALLOWAY



and silver leaved, English to name less than a few. As many compositions can be made from an herb plot as there are melodies on a keyboard, and you can scarcely make a false note.

I echo John Gerard when I say "May my blunt attempt serve as a whetstone to set an edge upon sharper wits."

FUCHSIAS—
UPRIGHT AND BASKETS
ALL SIZES
AND VARIETIES

Bennett's
GARDEN CENTER

7555 EADS AVENUE LA JOLLA 454-4241



LA COSTA
FLOWER SHOP
& NURSERY
horace and
mary m. anderson
400 La Costa Avenue
(714) 753-4336
Leucadia, Calif. 92024

HYPONeX® PLANT FOOD
Grows better plants, indoors or outdoors.
Clean & soluble. 10 oz.–$1.29. Makes 60 gals.
Free catalog, HYPONeX, COPLEY, OH. 44321

MISSION HILLS NURSERY
CAMELLIAS AND ROSES
COMPLETE SELECTION OF INTERIOR TROPICAL HOUSEPLANTS
Since 1924 We Give S&H Green Stamps Phone 295-2808
1525 Fort Stockton Drive San Diego 92103

WATER LILIES
FREE CATALOGUE
Pool Building & Planting Instructions
VAN NESS WATER GARDENS
Closed Sundays and Mondays
2460 North Euclid Avenue
UPLAND, CALIFORNIA 91786

Dahlia Cuttings

Larry Sisk



Sprouts almost ready to take for cuttings.



Clump of roots with sprouts and a slip ready to take.



Trimmed dahlia cutting. Place in rooting medium to depth of arrow.



Hairy root system develops in 14-20 days. Ready to pot.

GROWING PLANTS FROM CUTTINGS is one of the fascinating accomplishments that make dahlia gardening a year-around hobby.

The process starts in January or early February, an off time for most other gardening activities. In addition to taking cuttings, this is the time to put dahlia gardens and planting spots in shape: turning the soil, adding humus, planting green manure crops, fumigating, and so on.

For the average gardener, taking care of cuttings might be too much bother in view of the moderate cost of roots. But for the avid enthusiast, taking the cuttings, causing them to strike, planting them and watching them grow into flowering plants are rewarding indeed.

A winning bloom on the exhibition table in August has greater significance for the enthusiast if it came from a three-inch cutting started by him in January or February.

A lot of special equipment is not necessary, but one or two luxuries such as a garden house and heated starting bed make it easier--and more fun.

To begin, take roots from which cuttings are desired from storage. Place them in flats of vermiculite, peatmoss, sand or similar material. Partly cover the roots, leaving the crowns exposed. Dampen the flats and roots just enough to make everything moist. Cover loosely with burlap or dark cloth. Place the flats in a warm spot, hopefully where the temperature remains fairly steady.

Do not add more moisture to the flats unless they dry completely. Within several days one or more tiny sprouts or eyes will emerge from the crowns of the roots. Remove the burlap and give the flats all the light possible so the little sprouts will grow rapidly with a good green color.

Prepare for the next step by having ready a rooting medium, a rooting hormone, and containers for the cuttings.

When the sprouts develop two pairs of leaves and are three to four inches tall, they are ready. With a clean razor blade or sharp knife, cut each sprout below the first node, if there is any surplus, making a square cut.

Leave the top set of leaves on the cutting and carefully trim off the lower ones. Dip the end of the cutting in clean warm water, shake off surplus water and dip end in the rooting powder Again shake off the surplus.

Place the powdered end of the cutting in the rooting medium to a depth of about half an inch. Firm the rooting medium around the cutting and thoroughly moisten the medium, with warm water if possible.

Placing the starting container in the water so it will soak up from the bottom is best; otherwise, spray lightly until wet. After that, additional moisture should be applied by light sprinkling only when the rooting medium starts to dry out. Chances are that additional moisture will

Larry Sisk has been a grower of dahlias in this area for the past 15 years. Again he shares his knowledge with us.

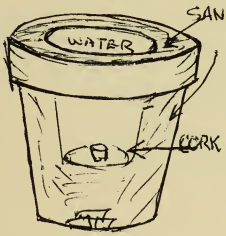
not be needed.

The best rooting medium is sharp, clean sand. Garden soil, peat, vermiculite and various other materials may be used, but they don't respond to the amateur touch as well.

The starting containers may be clay pots, cans, flats or boxes, filled to a depth of three to four inches. Pots are very satisfactory for the average experimenter. Six or eight cuttings are easily accommodated in a four-inch pot, and if the gardener doesn't have a garden house, the pot may be placed in a kitchen window.

An easy way to grow the cuttings is to use an eight- or 10-inch pot, with a three-inch pot buried in the center with the lip of the inner pot level with the rooting medium. The inner pot should be corked and kept filled with water; there will be just enough seepage to provide the exact amount of moisture needed for all the cuttings.

A plastic bag loosely propped and tented over the pot-in-a-pot



will help maintain the humidity that seems to help the striking process. The cuttings need some ventilation, so don't make the tent air-tight.

Ideal temperatures during the process are 65-75 degrees daytimes and 55-65 nights. In starting the rotts the 65-75 range or a little higher is best. If available, bottom heat at all times, from roots through growth of the new plants, is desirable. Boxes heated by cables with thermostats are excellent; keep the heat at about 75.

Light is essential during the entire process from the time the first shoots appear on the root crowns, except that direct sunlight on the cuttings should be avoided for the first few days, to avoid excessive wilting. Too little light will cause the sprouts to be spindly and lack color and will slow down or possibly stop the rooting.

To provide sufficient light in dark workrooms and garden houses, fluorescent lamps are recommended. A fixture with two 40-watt tubes 24 to 30 inches above the work area, turned on four to six hours will supply rewarding light supplement. The lamps should be of the greenhouse variety or ordinary household white.

With heat and light, the cuttings should strike in two to three weeks and normally indicate the appearance of roots with noticeable growth.

When the roots have formed, prick out the cuttings and put in individual four-inch pots. An ideal potting soil is two parts garden loam and one part leaf mold and one vermiculite.

Sift the soil around and over the roots to a depth of about an inch. Soak, preferably from the bottom, and then water only when the soil dries. Continue to supply light and heat until the weather warms, and given a two- or three-day hardening-off in a protected spot, the plants will be ready to set out in the garden.

With the roots placed on the bench in January and by the first of February, the little plants should be ready for the garden in late March or early April. Given a good start, they will grow better and make healthier plants than those started from roots.

After the first cutting is taken from a root, two little shoots will appear, and each time cuttings are taken more and more shoots will develop. The new ones may be taken and propagated until enough of a variety has been obtained. When enough cuttings from a given root are in the rooting medium, the old root itself may be potted and planted; just break off and discard all but one of the shoots as they appear.

If the crown of a root produces more than one eye, heel cuttings of the surplus shoots may be taken. This is done by removing the cutting with a "heel" of the old root attached and treating the cutting like the others.

Points of caution: Don't use too much water; just enough is plenty. Don't fertilize the rooting medium. Lack of ventilation causes damping-off. Provide some humidity during extreme dry spells. Avoid excessive heat; shade cuttings and plants from hot sunlight.

454-0404

Carlson Travel Service, Inc.

A TRAVEL-EXPERIENCED STAFF

1033 PROSPECT LA JOLLA, CALIFORNIA 92037 P..O. BOX 1453

"When considering trees she advocated planting small ones. As she tersely put it, 'Most people plant a five-dollar tree in a 50 cent hole. They would do better to plant a 50 cent tree in a five-dollar hole'."

The above quote concerns Kate Session's feelings about tree planting.

Wild *and* weedy

Helen V. Witham

BUT NOT ALL BAD.

Photos by Anne Galloway

Webster says: weed. noun A plant that is unsightly, useless, or injurious.

All of these adjectives are negative! We even make an adjective from the noun--one with negative connotation. A "weedy" plant is one that spreads too far and fast, crowds out choice plants or crops, or grows where it is not wanted.

Usually when we qualify the word weed by one or more of the following adjectives: noxious, ugly, pernicious, exasperating, persistant, or pestiferous; or when we go off into profanity, it means that the plant in question is simply too much for us, and we wish--oh, how we wish, that it would go away. Or we wish that it had never come here in the first place. Most of our weeds are invaders; they have not always been here. Like European brown snails, they were brought here one way or another, and, conditions being suitable, they stayed around and multiplied.

Many of our most common weeds are native to lands around the shores of the Mediterranean. Coming from a climate similar to ours, and having survived centuries of oppression by the farmers of that area, they are able to stand up and fight back in their newer homeland. Take the grassy weeds. Existing strains of wild oats, annual blue grass, Bermuda, brome, and crabgrass have been resisting man and his livestock for a thousand years or more. Is it any wonder that they are hard to beat?

The mustard family has sent many emigrants to us from Europe: wild radish, shepherd's purse, watercress, and several mustards. One of these, "Tumble Mustard", *Sisymbrium altissimum* has been studied at some length in order to analyze the reasons for its "success." One single plant was found to have 511,208 seeds--over half a million reasons for success!

The length of time a seed remains viable also affects our threshold of exasperation. Some kinds of seeds can just lie there, waiting, for 10, 20, even 40 years. Some are tricky: a cocklebur has two kernels in each of its burs; one sprouts this year, the other one next year. Another trick is to have inconspicuous flowers, appearing very early, so that the plant can set seed "before you know it."

Some weeds can regenerate lost parts. We all know what happens when we dig out only part of a dandelion root. The result is a bigger and better dandelion, one with several crowns! Bermuda, morning glory, and ragweed have widespreading underground rootstocks which must be completely removed or the cause is lost.)

Plants that are unattractive to foraging animals have a high survival rate. Through the evolutionary process good-tasting plants have been checked or eliminated, leaving those nobody likes. Some of them contain poisonous chemicals; other have spines or prickles, or have an unpleasant odor or taste.

Helen Witham is a native of San Diego County and has always been interested in plants and wildflowers. She is the assistant Curator of Botany at the Museum of Natural History.

A weed is not a kind of plant; there are no species of weeds. A tree, a grass, a fern, a rose, or any other kind of plant is a weed if we don't want it there. It may be a pest in one situation, perfectly welcome in another. Tall purple lupines and California poppies in a field of grain--what could be lovelier to look at on a sunny day in spring? But they do the crop no good, so weeds they are. Let them decorate the roadside and they become beautiful wildflowers.

When we refer to a plant as noxious, and so on through that list, we mean that nobody loves it where it is growing. The same plant may be useful, beautiful, or simply there, neither good nor bad, in another location. This is true of the plants illustrated.



Sweet Fennel

Sweet Fennel, *Foeniculum vulgare*, is that tall perennial we see along the roadsides and dry watercourses in late summer and fall, the one with the 6-inch wide umbels of yellow flowers and the handsome caterpillars. Its feathery blue-green foliage has the fragrance of anise or licorice when crushed. Plants usually consist of a cluster of stiff, erect stems growing from a stout carrot-shaped root. These stems may be head-high, or shorter.

Fennel is usually described as being a plant of "waste places". In such places it adds color and interest late in the season, and we could say it is a welcome weed. But in cultivated ground, where it grows more vigorously, using water and minerals and sunlight needed by crops, we would use one of those other adjectives, maybe several of them.

If the thought of exquisitely-patterned green-and-black-and-yellow caterpillars is unsettling, think ahead to a world without gorgeous black-and-yellow Swallowtail Butterflies, and you will find that thought even more unsettling.



Tree Tobacco, Wild Tobacco, Indian Tobacco

All three names have been used for *Nicotiana glauca*. This South American relative of cultivated tobacco is a tree-like shrub 10 to 20 feet tall. Usually the first year's growth consists of a single upright shoot. The young plant is powdery blue all over, even the stem. In the second and later years additional trunks or branches develop from the base, or near it. Later these stems or trunks turn a light brown or pale straw yellow. The tubular flowers are about 1-1/2 inches long, greenish yellow, and quite fragrant in a too-sweet way.

Nicoianas were named for Jean Nicot, French ambassador to Portugal, who introduced tobacco into France in the year 1560. This western kind is believed to have been brought north by Indians at a very early date. They used its leaves as a tobacco in

ceremonial smoking. Early settlers, too, used it to some extent as a smoke. Indians used these leaves as a remedy for sore throat or for rheumatism. The large succulent leaves were first steamed, then applied as a poultice.



Eucalyptus

Are you surprised to see the Eucalyptus in a list of weeds ? While not likely to become truly pestiferous, they do scatter seeds around, and seedlings do appear in places where they are not wanted, or at least anticipated. This is not a common occurrence, and such a seedling is easily eliminated -- one cut or one pull does it.

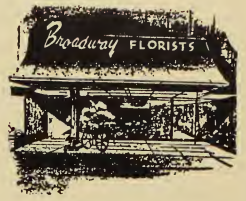
A tree out of place could be considered "useless", as in the definition, but not in Southern California where we need more and more of them. We won't say "unsightly", either. Rather, we will say; "What a happy circumstance that the Eucalyptus seeds sprouted and flourished there, so that we may enjoy the grace and beauty of those trees with no effort on our part."

Subscribe To
California Garden

RAINFORD
Flower Shop



Flowers for all Occasions
3334 Fifth Ave. 291-6111



Alice and Allan Zukor
Validated Customer Parking at Rear of Store
733 Broadway 239-1228

San Diego Floral Assn -

The first taste of Avocado to San Diegans - I remember a meeting of Floral Assn and Mr Peter Barnhart of Pasadena " Los A brought not more than three prints from Mr Huntingtons Estate. He cut tiny squares not over half inch if that; a tooth pick in each and passed the tray to excited members of our association about 1910 perhaps, I have no record but it was still a new group of enthusiasts - Mr Barnharts prophecy that it would be a popular tree here came true -

Alice M Rainford

Alice Rainford

Alice M. Clark

FOR YEARS THERE WAS A THREESOME that sort of existed in space without special meetings. It was bound together by an abiding love of flowers, a dedicated interest in the Floral Association and California Garden plus the coincidence of having "Alice Mary" as first and second names. In 1967, when Alice Mary Greer left us, the first ring in our small chain was broken and we missed her. On January fourth this year, just a week before her ninty-first birthday, Alice Mary Rainford found her way to the Elysian field of ever-blooming flowers. As the remaining link, I am grateful that chance and mutual interests have given me so many happy memories of my friends.

The stories of Kate Sessions and Alice Rainford should be written some day because their lives wove so much color and beauty into the tapestry of San Diego living. Both were women of distinct charm and personality. One went all out to persuade us to grow plants she loved while the other, in a quiet and penetrating way, showed us how to produce indoor beauty with the blooms from those plants.

When Alice was seven and living in Oakland she was taken to visit Miss Sessions who had graduated from Berkeley and was attracting attention with natural flower arrangements. Then and there the child decided to work for her some day. Eleven years later young Alice came to San Diego and walked into the combination nursery and flower shop Miss Sessions had established at fifth and C and asked for a job. The lack of an opening was no deterance. She made a place for herself in the cut flower department for ten years before taking it over herself, in 1908, under the name of "The Flower Shop". In becoming San Diego's first real florist she left Miss Session free to start a larger nursery on Sixth and Upas, whence came the many graceful palms and rare trees that ornament the west side of Balboa Park.

These hard-working ladies joined hands again in Octover, 1909, when the Floral Association but on a "Fall Exhibition" in the Palm Court of the U. S. Grant Hotel. For many years thereafter they helped with more flower shows, one pushing horticulture while the other staged the floriculture. We were lucky then when, under the editorial guidance of A. D. Robinson, California Garden appeared monthly for the large sum of one dollar a year and all the first families in town joined the Floral to promote garden beauty.

Alice Rainford was kept more than busy decorating for social events in San Diego and Coronado, in a style as elegant as that of any large eastern city. Each occasion she was asked to beautify had her personal attention. She was like a chef creating new dishes to delight his clientele. The understanding and originality she conveyed in her arrangements were so pleasing that the families she catered to through sequences of christenings, birthdays, weddings and funerals almost felt she was one of them.

About 1945, after forty-seven years in the business, Miss Rainford wrote a delightful book describing events in her career under the title of "Leaves from a California Florist's Notebook. Unfortunately it was never published but she gave it to California Garden with the privilege of printing it in whole or part. She was ahead of her time in thinking of flowers in relation to the color and decorative periods of the rooms they would enhance. To most florists flowers are just the materials of their trade but to Alice they were products of garden beauty and she knew as much about growing them as a nurseryman. She taught her patrons the best methods of preserving floral beauty. Her generous nature responded to constant calls for demonstrations on arrangements and wreath-making.

In between all this demanding if pleasant work Alice Mary escaped to her cabin in the San Diego mountain, there to absorb the serenity that would carry her through her busy city life. She cnanged her business name to "The Rainford Flower Shop" and later moved to a quieter part of town. Her advertisement has been in this magazine for over sixty years.

In her retirement Miss Rainford continued to enjoy retreats to her cabin but failing eyesight made her dispose of it eventually. She then began to write interesting reminiscenses for California Garden. These were the fruits and nuts from her rich plumcake of memory that she wanted to share with us. The last of these came in October, just two months ago, telling when Floral members first tasted avocados. In her declining years she still sought to enliven and instruct those around her. She loved the peace and quiet of the hills and trees that surrounded her abode at Hillside Chateau in Lemon Grove where its proprietors paid her the beautiful tribute of saying it was an honor to have her there.

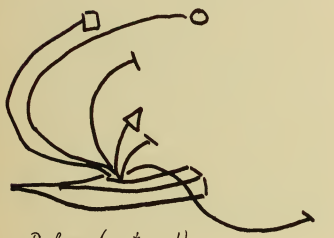
That was Alice Rainford. I know that she felt that the Great Divine who gave us flower beauty here had more splendid vistas awaiting us beyond and I rejoice that she has gone to that new life.

← Alice Rainford's letter.

Boat

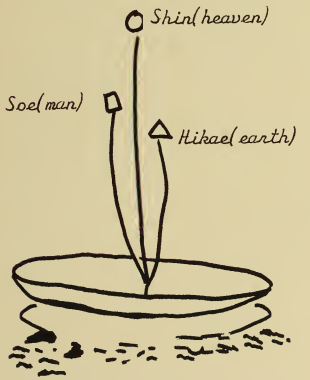


Irefune (homeward). Bow pointed right.



Defune (outward). Bow pointed left.

Tushi (helper)



Okifune (at anchor). May be on base.

BOATS ARE ROMANTIC OBJECTS which have always appealed to man's imagination. Boats are the vehicles that offer escape from the ordinary to the exotic and beautiful.

There are many sailing enthusiasts in the world, and those who do not have boats enjoy the sight of them. In Southern California boats symbolize the good time of sailing, a way of life for some people, and a joyous part of the landscape people daily behold.

Will Durant, the great historian, once said in a San Diego lecture that San Diego is a natural place for a city to develop and that any tribe or people who found such a natural harbor would use that area and develop a city. Perhaps this is true of the boat arrangement. If one people had not devised the arrangement idea, perhaps another would have. Western arrangers have taken the boat arrangement to their hearts, and wherever one goes the boat arrangement is seen. Some are traditional, some modern, some Western, some Oriental. The arrangements are seen in homes, clubs and on the public banquet table.

Boat arrangements are more numerous than real boats, perhaps because of the symbolism and beauty that may be achieved through the mind's eye. It takes an ambitious hand, a few flowers and a pause from the daily routine to create a boat arrangement.

Virginia Innis is a student in the Sogetsu School of Ikebana and a sailing enthusiast. Here she combines her two interests. She is a flower show judge, too.

The original boat arrangements were traditional, classical Japanese arrangements that grew in popularity in the tokonoma of the Japanese home. It was in the home that the symbolism and taboos developed.

TABOO

No water should be seen in the boat arrangement. In Japan, water in the boat symbolizes a sinking boat, an ill omen. Some boat containers have decking to hide the water; many arrangers use marbles, pebbles or stones to cover the water when the pin cup shows. (These should complement the general color scheme.)

SYMBOLISM

FAREWELL is expressed through a *defune*, outgoing boat with the bow pointed to the left. The placing of the design lines and flowers will vary from school to school of *Ikebana*. Generally, lines are forward to indicate motion. The lines are light to suggest buoyancy and a light heart. The line material is long, usually twice the length of the container. Frequently, it will have slender branches which symbolize oars. In most schools these branches will not touch the edge of the container and will dip into an imaginary water line.

WELCOME is expressed by an *irefune*, a homeward bound boat with the bow pointed to the right. This arrangement symbolized a good and prosperous journey The visual effect should be one of a boat laden with cargo, heavy in the water. Darker material and more mass lower in the boat achieve this effect. One large

Arrangements

Virginia M. Innis

flower (a spike of orchids or a giant clivia bloom) is effective in this arrangement. Several small flowers of one variety, carnations, sweet peas, violets, bunched and tied to make one unit are dramatic.

SWIFT SAILING boats symbolize a light heart and good times. It is an exciting boat arrangement. The line material is always exaggerated with curves which symbolize the billowing sails. The main line will frequently rise center back of the pin holder, curve toward the bow and then curve doubling back over the stern.

BOATS AT ANCHOR, *okifune,* may be on a base, but not all boat at anchor arrangements must have a base. (Bases are not used under boats that symbolize a boat sailing.) Boats at anchor arrangements indicate their position by the formal straight lines of the plant material which indicates the motionless mast. Vines or materials that curl are used to represent the rope line of the anchored boat. This is an arrangement of restraint and common sense; a boat in the harbor is out of danger from the storm.

LINES AND MATERIAL

Most Japanese schools of Ikebana recognize three basic lines in flower arranging. Various schools call the lines different names but they are generally called heaven, man and earth. The relative length of the branches vary with the schools. The longest branch is heaven, the next branch is man and is about three-quarters the length of the highest branch. The third line is earth and it is about three-quarters the length of man. For an arrangement that symbolizes sailing, many arrangers use line material of branches or foliage for the two tallest lines and flowers for the third and shortest line. The boat at anchor arrangement lends itself to the use of flowers, all of one variety for all lines. Some flowers that are pleasing in this arrangement are: Anthuriums and their relatives, the spathiphyllums and callas, Bird of Paradise, chrysanthemums, gladioli, iris and roses. Spikes of orchids are splendid, also.

Many arrangers in the San Diego area cherish Willow as the most desired line material. A form of Pussy Willow grows along California streams. Its branches

KOFU SCHOOL TRADITIONAL



are supple and slender and the catkins are miniature. The French Pussy Willow and the Cork-screw or Twisted Willow grow well in the area and are popular with arrangers. (Willow branches may be sprayed with paint when dry to be kept as good line material. Some add glycerine# to preserve the French Pussy Willow branches as a dry line material.) Any good bare branch with character is a good choice for line material. Branches with foliage should be well pruned. Flowering branches are cherished by arrangers. Branches with interesting patterns such as the Dollar Eucalyptus are frequently selected.

Grasses and reeds that grow near the water are always good choices. Horsetail, papyrus and Cat-tail are favorites. Pampas grass is dramatic in these arrangements. Long lasting foliage of clyvia, iris and flax is good. The flax has a great long line and grows in many colors.

Almost any flower or flowers may be used in the boat arrangement with the combination of branches or foliage.

To glycerinize plant material, use one-third glycerine to two-thirds water.

MAKE A BOAT CONTAINER

Many boat shape containers may be purchased; however, natural or devised containers are popular. Some of the palm trees which grow in the Southwestern United States have a growth which tree trimmers call "the boat". (Heavy sheath which covers the flowers). They are beautiful just as they fall or are cut from the tree but may be soaked in water and shaped into excellent boat forms.

Flower arranger Loretta Crocker fashions a boat container from tinfoil and spray paints it a desired color. Cup pinholders are usually used in these containers.

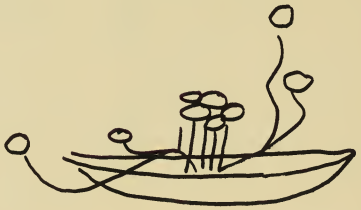
When San Diego County Supervisor De Graff Austin retired, in his honor, his friends donated a racing shell to the University of California. At his farewell luncheon, the most thoughtful and beautiful public table decorations of last year were devised by San Diego County Garden Supervisor, James Saraceno, and Editor, Barbara Jones. Traditional Japanese boats were made from giant green bamboo by Roy Jones. Some were large, some were small, and the guest of honor's table was graced with an eight foot "shell". All boats were filled with multi-colored carnations.

Tired, bored, up a creek. . . make yourself a boat arrangement and let it sail your troubles away.

KOFU SCHOOL MODERN







7580
Hillside Drive

Overlooking La Jolla Shores, just up the hill from Torrey Pines Road, or down the hill from Mt. Soledad, is **HILLSIDE NURSERY.** Whichever approach you take, you'll find a WONDERLAND OF PLANTS — rare Begonias, Philodendrons, Tropicals, fine House Plants — a wide variety of well grown nursery stock.

Corey Hogewoning, Prop.

LA MESA NURSERY

"Everything for the Garden"

Dramatize the garden.

Bankamericard Delivery
Master Charge

FREE GIFT WRAPPING

8480 La Mesa Blvd. — 466-5703

Antonelli Brothers
TUBEROUS BEGONIAS
2545 Capitola Road
Santa Cruz, California 95062
36-page color catalog 25 cents

"SCRAP OF PAPER" *1904*

"As in wars and other major events, the formation of the San Diego Floral Association was precipitated by a somewhat trivial incident. Returning to San Diego in the fall of 1904, after two years abroad, I was full of a Flower Show I had attended in the Temple Gardens in London, and when I interviewed Forecaster Fred Carpenter for a preview of the weather, which he declined to give, I spilled over about the Temple, and Flower Shows in general, enough to enthuse him with the idea of one for San Diego. Mr. C. was some kind of an officer in the Chamber of Commerce, and he brought up the matter before that august body, which appointed a committee to further the idea. This committee was Carpenter, Gifford, the olive man, and I, and we duly foregathered and decided to call a public meeting. The meeting was held in the Express Office on Broadway, and had a fair attendance. My mind had become set on an independent organization for the job. I was then, and still am, rather afraid of committees, as they usually originate in buck-passing, and have a facility for continuing the process.

"Mr. Carpenter took the chair and called on me for the opening argument. Others spoke, all in favor of the idea, among them Louis Blochman . . . Rev. Hinson, who quoted that poem about the little flower growing in the crannied wall. A resolution to form the San Diego Floral Association was put and unanimously adopted, and signatures were taken on a scrap of paper."

So writes Alfred D. Robinson, Founder-President-Editor of *California Garden,* in the columns of that magazine, on the occasion of its thirtieth birthday in 1939.

The first meeting was held in June, 1907. He continues:

"In 1909, when the Floral Association was two years old, the idea of having its own publication to record its activities and spread floral information and advice, became almost a demand from the ever-growing membership. Local papers were printing meager reports of the doings of the Association and, when the inadequacy of these was pointed out to the editors, they frankly confessed that they had no one on their staff equal to the job. It should be remembered that, in those days, it was little short of a sign of grave eccentricity to be more than casually interested in flowers.

"The committee to arrange for the publishing of the magazine, was L. A. Blochman, who suggested the name of *California Garden,* K. O. Sessions, Miss Manasse, F. A. Frye and A. D. Robinson, who got out the first number for July, 1909."

Mr. Robinson then calls attention to the Foreword in the first issue, in which "the aims and hopes of the magazine are clearly stated." You may read all this for yourself in the Summer, 1959, *California Garden,* which is a lithographed copy of the first two editions of 1909, including the cover design of matilija poppies, painted for the occasion by A. R. Valentien. Thus the San Diego Floral Association and its magazine were on their way.

To speak of *California Garden* in its own pages is very like a dog taking hold of its own tail (tale), but inasmuch as the publication of the magazine has been the main and continuous activity of the Association, unbroken for fifty years, and financed always, until recently, by proceeds from shows—except once, it's true, by a loan—and inasmuch as it is the oldest horticultural magazine in the United States, measured by years of continuous publication; and because it is the only available magazine dealing with local conditions, it speaks up for itself.

Reprinted from Autumn 1959

G. S. JOHNSON ROSE NURSERY

Rose Specialists

Bushes - Climbers - and Tree Roses

Bare Roots in Season

in cans, available all year

Spray Materials and Fertilizers

24 YEARS IN SAME LOCATION

8606 Graves Ave., Santee
corner Graves & Prospect
Open 8 A.M. to 5:30 P.M.

Off Highway 67
Phone: 448-6972
Closed Wednesdays

Cutting Roses for Indoor Use

Cutting roses for indoor use is an art, but it helps if you remember that cutting a flower for a bouquet or removing spent blooms really amounts to pruning. When pruning is correctly done, the result is healthier and larger plants and increased flower production.

When cutting off a flower, never leave a stub and never twist off a faded bloom because, in either case, the stem dies back to the first node. The leaving of a jagged wound is exposing the injured plant tissue to fungus which are ever present and waiting to grow in the wound. Roses may be cut with fairly long stems from established plants, as this keeps the bushes low and well branched and eliminates the tendency for tall, leggy plants that result when flowers are cut with short stems from the top of the plant. Only roses with short stems should be cut from new plants the first year they are set out.

Do not cut too severely on any rose bush, however, because the loss of a really large quantity of foliage puts a strain on the plant. It takes from five to seven leaves (not leaflets) to manufacture enough food for each bloom, so leave the plant enough foliage to grow and produce blooms in a normal manner.

AARS 1971

The Aloe and Agave Garden in Balboa Park, planned and executed as a tribute to Kate Sessions, was acclaimed a splendid scientific collection of succulents and cacti, when the bronze placque was unveiled by President Greer, in 1935, and the planted area was presented to the city. Now it is no longer a credit to the name it bears, though a larger exhibit in the Huntington Gardens, from which many valuable contributions were received, continues to be a mecca for tourists and students. It is hoped that the local garden can be saved before it is too late.

Retired? Why Not Relax, Too?



Garden at Monte Vista Lodge, San Diego's full-service retirement residence.

Here's the place to relax; to fully enjoy your retirement. Your own private, ground-level apartment with maid service. Three meals daily, selecting your favorites from a variety of menus. Special diets as needed. Your own kitchenette for snacks. Scheduled transportation downtown each day, plus frequent recreational trips. Complete infirmary with nurses on duty round-the-clock. Auditorium, library, TV center, beauty shop. Heated swimming pool, shuffleboard, and other recreational facilities. Personal laundry service. And more.

NO ENTRANCE FEE, NO CAPITAL INVESTMENT. Come for a few months or stay for a lifetime; the choice is yours. Pay only the first and last months' rent.

PLAN NOW TO VISIT US. We're just a few blocks south of Highway 94 . . . only minutes from downtown San Diego. Phone or write Robert Beasley, Director, and let us know when you're coming; or ask for additional information, and we'll send it by return mail. We look forward to hearing from you.

MONTE VISTA RETIREMENT LODGE

Telephone (714) 465-1331

2211 Massachusetts Avenue • Lemon Grove, California 92045

Weeds in your
Ice Plants?
Spray them out
with
Ice Plant Weeder

AT LAST
THE PILL
for your plants
Ferti-Pills #1
Ferti-Pills #2
The new discovery for better trees, roses, shrubs, ground covers and bedding plants—used by the millions by professional landscapers. Feeds up to 2 years.
Available at your
local nursery or garden store.

WE'VE MOVED!
Walter Andersen
Nursery
FREE GARDEN CLASSES
10:30 Thursday and Saturday
Nursery Stock and Garden Supplies
for Beautiful Gardens
We Specialize in Indoor Plants
3642 Enterprise San Diego 92110
Phone 224-8271

SAN DIEGO'S LARGEST
NURSERY FACILITY
. . . with complete, personalized attention to your every garden need.
Presidio Nursery
and Florist
LINDA VISTA RD. at MORENA BLVD.
PHONE 297-4216

Orchids

Duane "Bud" Close
San Diego County Orchid Society

JANUARY AND FEBRUARY present us with the darkest and usually the coolest months of the year. If the weather is extremely cold, (which increases the use of artificial heat), careful examination of your plants may show some extreme dryness. Be especially aware of the plants that are quite close to your heating system. Most plants should not be allowed to dry out excessively as many are not actively rooting, and if their roots are lost, either through too much or too little moisture, the vigor of your plants will soon be lost.

Some watering patterns can be followed. For example, mature Cattleyas and allied crosses in six- or seven-inch pots should generally be watered once a week. This schedule may also be used for Phalaenopsis and Vandas unless they are being grown at warmer temperatures than the usual 60-62 degree night temperatures used for Cattleyas.

All orchid plants starting to flower need more water than they normally would. If you do not supply the extra water, the plant will extract it from its bulbs which will in turn shrivel. Plants with poor root systems caused by rotting or damage to roots during repotting should not be allowed to flower as this will also take too much from the blub system. Just simply pinch off the buds as they emerge (as small as possible). Cypripediums should be kept moist, so be sure not to let them dry out--especially now that the flowers are beginning to show.

Cymbidiums are actively producing their flower spikes at the present time. If these plants are plump with a good root system the spikes will continue to develop, but if allowed to dry out excessively, the result is quite often a yellowing and dropping of the buds from the flower spike.

There may be many species of orchids that need but little water at this time of the year. To determine your own conditions, follow this simple rule: if the plant is making new growth or flowers, it should be watered. If dormant, do not water except with an occasional fog spray. Even without regular watering, these dormant plants will start growth at the proper time.

Again, be alert to the invasion of insects, even in December and January. Look for the Red Spider (two-spotted mite), especially on Cymbidiums. Turn over the leaves, and pull between your thumb and fore-finger, looking for red streaks. Be very suspicious of plants that are more yellow or paler green than the rest. Slugs, aphids, and orchid scale are very active in the warm, dry greenhouse, so be very alert for signs of their damage.

As most of us now use various mixtures of bark, etc. for many of the orchid varieties we grow, a year-round supply of fertilizer will be necessary. The only exception to this might be plants that are still in osmunda or tree fern, as they seem to need little additional nutrient during these short days.

Duane Close has been growing orchids in San Diego for 24 years.



PHOTO BY BETTY MACKINTOSH

If you would have seen the above picture several years ago, your thoughts would have been - "What a beautiful early morning winter scene of mist in the backcountry." Today we wonder if perhaps it is heavy smog and if all of the trees are dead because of air pollution.

It is a winter scene of a dormant willow and dormant fruit trees in a fog at Cuyamaca. But, it does serve to illustrate the point that we all must work to save our earth in all its beauty.

ECOLOGY NOTES:

Remember the three laws of Ecology: (1)Everything is connected with everything else; (2) Everything goes somewhere; and (3)Nothing is free. Every benefit has a cost factor in either dollars or environment change. To survive, we must learn to weigh the benefit against the environmental cost before we make any changes.

HEY KIDS! You can now trade a pound of squashed ALUMINUM cans for ten cents worth of ice cream at Farrells.

Put your old NEWSPAPERS in one of the Kiwanis bins. 120# of paper saves one tree.

It is easy to separate one's trash into separate containers; one for cans, one for glass, one for plastic, one for things we do not recycle yet. Every city must get into this ecology system. Building a glass or sludge reclaiming plant is surely a better use for our tax dollar than a TV program or another amusement center.

Don't panic when you see a bug in your garden. Many are useful. A few bugs won't hurt a healthy garden! Ladybugs, lacewings, Trichogramma wasps eat caterpillar eggs, aphids, and other pests. Praying mantis eat almost all insect pests. The nearest suppliers we know are Ecological Insect Service 15075 W. Calif. Ave., Kerman, Calif. 93630 and the Pyramid Nursery, Box 5274, Reno, Nevada 89503. Let us know of others.

Have you been unable to get any information on meetings being held on ecology situations? The "Brown Act" says that all meetings of the City and County are open to you, the one who pays the bills (the public).

SAN DIEGO FLORAL ASSOCIATION

FLORAL BUILDING, BALBOA PARK
232-5762
(Under the sponsorship of
The Park and Recreation Dept., City of San Diego)

Third Tuesday, Floral Building
Pres.: Mrs. Donald A. Innis
3211 Trumbull St., S.D. 92106 225-1464

FLOWER ARRANGERS' GUILD OF SAN DIEGO
First Thursday, Floral Building, 7:30 p.m.
Pres.: Mrs. J. Wells Hershey 443-2329
12505 Royal Rd., El Cajon 92021
Rep: Mrs. J. Otto Crocker 582-5316
4749 Redlands Dr. SD 92115

COORDINATING GROUPS

SAN DIEGO BOTANICAL GARDEN FOUNDATION, Inc.
Second Thursday, Floral Building
P.O. Box 12162, S. D., Calif. 92112
Pres.: Mrs. Wm. E. Betts, Jr. 223-7259
906 El Mac Place, San Diego 92106

PARTICIPATING GROUPS

IKEBANA INTERNATIONAL CHAPTER No. 119
Fourth Wednesday, Floral Bldg. 10:00 a.m.
Pres.: Mrs. R. K. Jones, II
3971 Del Mar Ave., San Diego 92107 222-9737
Rep.: Mrs. James H. Ard 276-6398
3031 Karnes Way, San Diego 92117

AFFILIATE MEMBERS 1969

CONVAIR GARDEN CLUB
First Wednesday, Floral Building, 7:30 p.m.
Pres.: Henry Boyd 264-1283
6581 Broadway, San Diego 92114
Rep.: Mrs. Richard Miller 284-8316
5150 35th S.E., San Diego 92116

COUNTY CIVIC GARDEN CLUB
Meets every Thursday, 12m to 1 p.m.
Garden House, Grape and 101 Civic Center
Pres.: Mrs. Mary Van Zeyl
12254 Wintergardens Drive,
Lakeside, Calif. 92040 443-6165

LA JOLLA GARDEN CLUB
First Tuesday, 1:00 p.m., St. James Hall
7776 Eads Ave., La Jolla
Pres.: Mrs. John Marx
1216 La Jolla Rancho Rd.,
La Jolla 92037 459-6417

LAS JARDINERAS
Third Monday, 10 a.m. Homes of members
Pres.: Mrs. Max Foresman 459-9620
7946 Calle de la Plata, La Jolla 92037

MEN'S GARDEN CLUB OF SAN DIEGO CO.
Fourth Thursday, Floral Bldg., 7:30
Pres.: Mr. Ralph Kircher 424-B035
1178 14th St., Imperial Beach 92032
Rep.: Dr. J. W. Troxell 282-9131
4950 Canterbury Drive, S.D. 92116

ORGANIC GARDENING CLUB
Third Friday, Floral Building, 7:30 p.m.
Pres.: Paul Canaday, Sr. 264-6702
303 No. 47th St., CD-4, San Diego 92102

POINT LOMA GARDEN CLUB
First Friday, Floral Bldg., 10 a.m.
Pres.: Mrs. Louis Kulot
2732 Azalea Drive, San Diego 92106 222-5480
Mrs. Harold Skinner
3530 Lowell Street, San Diego, Calif. 92106

SAN DIEGO BONSAI SOCIETY, INC.
Second Sunday, Floral Bldg., 1-5 p.m.
Pres.: Lester Jaussaud 479-1639
201 Lake View Ave., Spring Valley, Calif. 92077
Rep.: Mrs. Frances J. White 224-1122
4854 Del Mar Ave., S. D. 92107

SAN DIEGO CACTUS & SUCCULENT SOCIETY
First Saturday, Floral Building, 1:30 p.m.
Pres.: Ione Hubner 444-3439
231 W. Park Ave., El Cajon 92020
Rep.: Mrs. Peter Klinefelter 276-6517
2201 Fairfield Street
San Diego, Calif. 92110

SAN DIEGO CAMELLIA SOCIETY
Second Friday, Floral Building, 7:30 p.m.
Pres.: Mr. William Gibson
3765 Pio Pico St., S.D. 92106 223-1861
Rep.: Mrs. Deena Montmorency 297-2625
4349 Florida St., S.D. 92104

SAN DIEGO COUNTY DAHLIA SOCIETY
Fourth Tuesday, Floral Building, 7:30 p.m.
Pres.: John C. Wright 583-2548
4905 Twain Street San Diego 92120
Rep.: Mrs R. M. Middleton 296-3246
3944 Centre St. S.D. 92103

SAN DIEGO EPIPHYLLUM SOCIETY
Third Wednesday, Floral Bldg., 7:30 p.m.
Pres.: Wm. H. Nelson 298-3349
4253 Maryland Street, San Diego 92103

SD-IMPERIAL COUNTIES IRIS SOCIETY
Meets 3rd Sunday, Floral Bldg., 2:30 p.m.
Pres.: Mrs. Eugene Cooper
4444 Arista Drive, San Diego 92103 295-7938

SAN DIEGO COUNTY ORCHID SOCIETY
First Tuesday, Floral Building, 8 p.m.
Pres.: Mr. Ralph R. Zuranski
4479 Longbranch Ave., San Diego 92107 223-0979
Rep.: Mrs. Ione Maloney 479-7742
3058 Bonita Mesa Rd., Bonita, Calif. 92002

SAN DIEGO FUCHSIA SOCIETY
Second Monday, Floral Building, 8 p.m.
Pres.: James Watson 295-0963
615 W. Pennsylvania, San Diego 92103
Rep.: Mrs. Mildred Murray 753-7756
467 East Fulvia St.
Encinitas, Calif. 92024

SAN DIEGO ROSE SOCIETY
Third Monday, Floral Building, 8 p.m.
Pres.: Mrs. Harry B. Cutler 466-7579
4671 Toni Lane, San Diego 92115
Rep.: Mrs. Felix White 264-4440
5282 Imperial Ave., S.D. 92114

SOUTHWESTERN GROUP, JUDGES' COUNCIL CALIFORNIA GARDEN CLUBS, INC.
First Wednesday, Floral Building, 10:30 a.m.
Pres.: Mrs. R. E. Rosenberg
3671 Pringle St., S.D. 92110 295-1537
Rep.: Mrs. Roland S. Hoyt 296-2757
2271 Ft. Stockton Dr. S.D. 92103

S. D. TROPICAL FISH SOCIETY
Second Sunday, 7:30 p.m.
Pres.: Bill Thompson 272-0415
4930 Gallatin Way, San Diego 92117

OTHER GARDEN CLUBS

ALFRED D. ROBINSON BEGONIA SOCIETY
Third Friday, Homes of Members, 10 a.m.
Pres.: Miss Myrle Patterson 224-1572
4310 Piedmont Dr., S.D. 92107

BERNARDO BEAUTIFUL & GARDEN CLUB
First Wednesday, 1:00 Seven Oaks Community Center, Bernardo Oaks Dr., Rancho Bernardo
Pres.: Robert J. Irvin
12214 Lomica Dr. San Diego 92128
(Rancho Bernardo) 487-2987

CARLSBAD GARDEN CLUB
First Friday, Conference Room, Public Library 1:30 p.m.
Pres.: Mrs. Floyd Anderson 729-7610
3595 Catalina Drive, Carlsbad 92008

CHULA VISTA GARDEN CLUB
Third Wednesday, Chula Vista Woman's Club, 357 "G" St., 1:00 p.m.
Pres.: Mrs. Wm. Hedenkamp 422-2978
515 Second Ave., Chula Vista 92010

CITY BEAUTIFUL OF SAN DIEGO
Pres.: Mrs. Raland E. Smith 488-0830
4995 Fanuel St., Pacific Beach 92109

CORONADO FLORAL ASSOCIATION
Meets 1st Tuesday. Red Cross Bldg., 1113 Adella Lane
Pres : Thomas J. Gliaorea
309 1st Coronado 92118 435-1007

CROSS-TOWN GARDEN CLUB
Third Tuesday, Knights of Columbus Hall, 3827 43rd St., S.D. 92105, 8 p.m.
Pres.: Mr. Charles Williams
3865 41st Street, San Diego 92105 284-2317

CROWN GARDEN CLUB OF CORONADO
Fourth Thursday, Red Cross Bldg, 1113 Adella Lane, 9:00 a.m.
Pres.: Mrs. William Marten 435-0926
761 Country Club Lane, Coronado 92118

DOS VALLES GARDEN CLUB
Meets 2nd Tuesday, Alt. Pauma Valley and Valley Center 1:30 p.m.
Pres.: Mrs. Gilbert Hansen 746-5030
14767 Fruitvale Rd. Valley Center 92082

EL CAJON WOMAN'S CLUB (Garden Section)
1st Monay, 9:30 a.m. Members homes.
Pres.: Mrs. John Ohlson 444-2753
655 Bradford Rd., El Cajon 92020

ESCONDIDO GARDEN CLUB
3rd Friday, Woman's Club, 240 So. Bdwy., 1:00 p.m.
Mrs. Charles Younger 746-5109
368 Eldorado Drive Escondido 92025

FALLBROOK GARDEN CLUB
Last Thursday, Fallbrook Woman's Clubhouse, 1:30 p.m.
Pres.: Mrs. Clair Acker 728-2341
1061 Riverview Dr. Fallbrook 92028

GREEN VALLE GARDEN CLUB, POWAY
Meets 4th Thursday, 9:30 a.m. Homes of members
Pres.: Mrs. R. L. Smith 748-0475
13270 Stone Canyon, Poway 92064

GROSSMONT GARDEN CLUB
Second Monday, 10 a.m.
8155 University Ave., La Mesa
Pres.: Mrs. Ray Moore
7393 La Mesita Place, La Mesa 92041 466-6943

HIPS and THORNS
Meets at Members' Homes Quarterly.
Pres.: Mrs. Eugene Cooper 295-7938

IMPERIAL BEACH GARDEN CLUB
3rd tuesday, Imperial Beach Civic Center, 1:30 p.m.
Pres.: Kathy Rolfes 424-7487
122B Seventh St., Imperial Beach 92032

LAKESIDE GARDEN CLUB
3rd Monday. Lakeside Farm School, 7:30 p.m.
Pres.: Mrs. Lucy May Carender
9282 Riverview, Lakeside 92040

LA MESA WOMAN'S CLUB (Garden Section)
3rd Thursday, La Mesa Women's Club, 1:00 p.m.
Pres.: Mrs. Val Sexton
9144 Johnson Ave., La Mesa 92041 466-0047

LEMON GROVE WOMAN'S CLUB
(Garden Section)
First Tuesday, Lemon Grove Woman's Club House, 1 p.m.
Pres.: Mrs. Hal Crow 466-3330
3850 Quarry Rd., La Mesa 92041

MISSION GARDEN CLUB
Meets First Tuesday, Asbury Methodist Church, 4102 Marlborough Ave., S.D. 92116, 8:00 p.m.
Mrs. Vera Eimar 477-5344
1129E 16th St., National City 92050

NORTH COUNTY ROSE SOCIETY
Meets First Tuesday, 7:30 p.m. at Palomar College
Pres.: James A. Kirk 748-3870
15131 Espola Road, Poway 92064

NORTH COUNTY SHADE PLANT CLUB
Second Sat., 1:30 p.m., Home Federal Bldg., Encinitas
Pres.: Jim D. Campbell 278-4372
2903 Greyling Dr., S.D. 92123

O. C. IT GROW GARDEN CLUB
Second Wednesday, S. Oceanside School Auditorium, 7:30 p.m.
Pres.: Mr. Michael J. Hardick 722-3583
1409 Division, Oceanside 92054

PACIFIC BEACH GARDEN CLUB
Meet second Monday, 7:30 p.m. Community Club House, Gresham and Diamond Sts., Pacific Beach
Pres.: Mrs. Arthur Berthelsen
1434 Grand Ave., San Diego 92109 274-6081

PALOMAR CACTUS & SUCCULENT SOCIETY
Third Saturday, 1 p.m., Palomar College Foreign Language Building, Room F22
Pres.: Mrs. Frances Lawson 745-1720
P. O. Box 288, Valley Center 92082

PALOMAR ORCHID SOCIETY
Meets Third Wednesday, 7:30 p.m., Avocado Inn, 114 Hillside Terrace, Vista
Pres.: Paul Lea
1402 Hunsaker St., Oceanside 92054 722-8083

POWAY VALLEY GARDEN CLUB
2nd Wednesday, 9:30 a.m. "Haley's," 13519 Poway Rd.
Pres.: Mrs. Paul L. Bemiller 748-2572
1250B Buchskin Trail, Poway 92064

QUAIL GARDENS FOUNDATION, INC.
230 Quail Garden Drive, Encinitas, Calif. 92024
Mrs. M. J. von Preissig 286-8818
5071 55th St. San Diego, Calif 92115

RANCHO SANTE FE GARDEN CLUB
Second Tuesday—Club House, 2:00 p.m.
Pres.: Hubert Larson
P.O. Box 782 Rancho Santa Fe 92067 756-1926

SAN CARLOS GARDEN CLUB
Fourth Tuesday, San Carlos Club, 6955 Golfcrest Drive
Pres.: Mrs. Douglas Oldfield
6372 Lake Levon, San Diego 92119

SAN DIEGO BROMELIAD SOCIETY
1st Thursday, 8 p.m. Porter Hall Clubhouse (8425 Univ.), La Mesa
Pres.: Wm. E. Knerr, Jr. 279-1134
7178 Hyatt, San Diego 92111

S.D. CHAPTER CALIF. ASS'N NURSERYMEN
Second and Fourth Thursday, 7:30 p.m.
Pres.: Mr. Del Johnson 422-5198
366 Broadway, Chula Vista 92010

SAN DIEGUITO GARDEN CLUB
Third Wednesday, Seacoast Savings Building, Encinitas, 10 a.m.
Pres.: Mrs. Dorothy Reavell
1222 Santa Fe Dr., Encinitas 92024 753-4908

SAN MARCOS GARDEN CLUB
Pres.: Mr. E C. Pferdner
1221 San Julian Dr., San Marcos 92069 744-0226

SAN MIGUEL BRANCH, AMERICAN BEGONIA SOCIETY
Second Wednesday, Porter Hall Clubhouse, La Mesa (8425 University) 8:00 p.m.
Pres.: Mrs. Peter P. Lee 239-3169
1852 31st St., S.D. 92102

SANTA MARIA VALLEY GARDEN CLUB
Second Monday, Ramona Women's Club House, 5th and Main, 9:30 a.m.
Mrs. Troy Reese 789-1334
Rt. No. 1, Box 514-H, Ramona 92065

SANTEE WOMEN'S CLUB Garden Sec.
Pres.: Mrs. Leon Roloff 448-0291
9138 Willow Grove Ave., Santee 92071

VISTA GARDEN CLUB
First Friday, Vista Rec. Center 1:00 p.m.
Pres.: Mrs. Mildred Kessler 724-5594
P. O. Box 44, Vista 92083

VISTA MESA GARDEN CLUB
Second Tuesday, 7:30 p.m. Family Association Center
Pres.: Mrs. Clarence Gominger
7487 Blix St., San Diego 92111 277-1285

CALIFORNIA GARDEN
San Diego Floral Association
Floral Building, Balboa Park
San Diego, Ca. 92101

RETURN REQUESTED
RETURN POSTAGE GUARANTEED

build in a jiffy—
move in a minute!

Instant Planters

An inexpensive idea
that is sure to please
"green thumbers"
and beginners alike.

Hazard

Mission Valley, San Diego

